Columbia University
in the City of New York

THE LIBRARIES

From Library of
Prof. C. Babenroth

WITH THE WORLD'S GREAT TRAVELLERS

THE PRODIGAL'S RETURN

Painting by Spada

CONTENTS.

SUBJECT.	AUTHOR.
New Dependencies of the United States	Oliver H. G. Leigh
Winter and Summer in New England	Harriet Martineau
Niagara Falls and the Thousand Islands	Charles Morris
From New York to Washington in 1866	Henry Latham
The Natural Bridge and Tunnel of Virginia	Edward A. Pollard
Plantation Life in War Times	William Howard Russell
Among Florida Alligators	S. C. Clarke
In the Mammoth Cave	Thérèse Yelverton
Down the Ohio and Mississippi	Thomas L. Nichols
From New Orleans to Red River	Frederick Law Olmsted
Winter on the Prairies	G. W. Featherstonhaugh
A Hunter's Christmas Dinner	J. S. Campion
A Colorado "Round-Up"	Alfred Terry Bacon
Among the Cowboys	Louis C. Bradford
Hunting the Buffalo	Washington Irving
In the Country of the Sioux	Meriwether Lewis
The Great Falls of the Missouri	William Clarke
Hunting Scenes in Canadian Woods	B. A. Watson
The Grand Falls of Labrador	Henry G. Bryant
Life Among the Esquimaux	William Edward Parry
Fugitives from the Arctic Seas	Elisha Kent Kane
Rescued from Death	W. S. Schley
The Muir Glacier	Septima M. Collis
A Summer Trip to Alaska	James A. Harrison
The Fort William Henry Massacre	Jonathan Carver
The Gaucho and His Horse	Thomas J. Hutchinson
Valparaiso and Its Vicinity	Charles Darwin
An Escape from Captivity	Benjamin F. Bourne

List of Illustrations

The Prodigal's Return . . . . *Frontispiece*

Patriotism 18

The Catskills. Sunrise from South Mountain . . 26

New York and The Brooklyn Bridge . . . 40

Pennsylvania Avenue, Washington 50

On the Coast of Florida 76

Sunrise from the Summit of Pike's Peak . . . 116

A Kansas Cyclone 136

Shoshone Falls, Idaho 170

Muir Glacier, Alaska 232

PREFACE.

Next to actual travel, the reading of first-class travel stories by men and women of genius is the finest aid to the broadening of views and enlargement of useful knowledge of men and the world's ways. It is the highest form of intellectual recreation, with the advantage over fiction-reading of satisfying the wholesome desire for facts. With all our modern enthusiasm for long journeys and foreign travel, now so easy of accomplishment, we see but very little of the great world. The fact that ocean voyages are now called mere "trips" has not made us over-familiar with even our own kinsfolk in our new dependencies. Foreign peoples and lands are still strange to us. Tropic and Arctic lands are as far apart in condition as ever; Europe differs from Asia, America from Africa, as markedly as ever. Man still presents every grade of development, from the lowest savagery to the highest civilization, and our interest in the marvels of nature and art, the variety of plant and animal life, and the widely varied habits and conditions, modes of thought and action, of mankind, is in no danger of losing its zest.

These considerations have guided us in our endeavor to tell the story of the world, alike of its familiar and unfamiliar localities, as displayed in the narratives of those who have seen its every part. Special interest attaches to the stories of those travellers who first gazed upon the wonders and observed the inhabitants of previously unknown lands, and whose descriptions are therefore those of discoverers.

One indisputable advantage belongs to this work over the average record of travel: the reader is not tied down to the perusal of a one-man book. He has the privilege of calling at pleasure upon any one of these eminent travellers to recount his or her exploit, with the certainty of finding they are all in their happiest vein and tell their best stories.

The adventures and discoveries here described are gathered from the four quarters of the globe, and include the famous stories of men no longer living, as well as those of present activity. Many of the articles were formerly published in the exhaustive work entitled, "The World's Library of Literature, History and Travel" [The J. B. Lippincott Co., Philadelphia].

For the rich variety and quality of our material we are indebted to many travellers of note, and to the courtesy of numerous publishers and authors. Among these it is desired to acknowledge particularly indebtedness to the following publishers and works: To Harper and Brothers, for selections from Stanley's "Through the Dark Continent," Du Chaillu's "Equatorial Africa," Prime's "Tent-Life in the Holy Land," Orton's "The Andes and the Amazon," and Browne's "An American Family in Germany." To Charles Scribner's Sons: Stanley's "In Darkest Africa," Field's "The Greek Islands," and Schley's "The Rescue of Greely." To G. P. Putnam's Sons: De Amicis's "Holland and its People," Taylor's "Lands of the Saracens," and Brace's "The New West." To Houghton, Mifflin and Co.: Melville's "In the Lena Delta," and Hawthorne's "Our Old Home." To Roberts Brothers: Hunt's "Bits of Travel at Home." To H. C. Coates and Co.: Leonowen's "Life and Travel in India." Equal tribute is offered to the au-

thors who have courteously permitted the use of their material, and in these acknowledgments we include Charles Morris, editor of the above work, and Oliver H. G. Leigh, whose pen has won honors in various fields, for their special contributions to this edition.

WITH THE WORLD'S GREAT TRAVELLERS.

NEW DEPENDENCIES OF THE UNITED STATES.

OLIVER H. G LEIGH.

[The trend of events makes it certain that our geographical knowledge is going to be enlarged by personal investigation. The boom of Dewey's big guns sent us to our school-books with mixed feelings as to the practical value of much of our alleged learning. The world suddenly broadened as we gazed in surprise. Hawaii invited itself into the circle of new relations. The near West Indies and the remote Philippines craved peculiar attentions. Whether moved by commercial zeal, official duty or the profitable curiosity of pleasure or scientific investigation, he is in the highest sense a patriotic benefactor of his own country and the land he visits, who devotes his energies to making Americans more intimately acquainted with the communities now linked with the most powerful of nations.]

The scope of holiday travel, or tours of profitable investigation, has been widely extended by the new relationship between the United States and Hawaii, now included in its possessions, and the former Spanish islands over which it exercises a kindly protectorate. Through the usual channels public sentiment is being formed upon the resources and responsibilities of the new dependencies. Many will be attracted to Cuba, Porto Rico, Hawaii, and even to the remote Philippines, by considerations of a practical kind. No truer patriotic motive can inspire the American traveller than the desire to develop the natural resources, and, by consequence, the social welfare of a dependent com-

munity. Whether bent on business, pleasure, or official duty in the service of the United States the prospective voyager, and the friends he leaves behind him, will profit by these gatherings from the impressions and experiences of former travellers.

The approach to Havana at daybreak overwhelms the senses with the gorgeous beauties of the sky and landscape. Foul as the harbor may be with city drainage it seems a silvery lake encircled with the charms of Paradise and over-arched with indescribable glories of celestial forms and hues and ever-changing witcheries wrought by the frolicsome sun in his ecstasy of morning release. Strange that where nature most lavishes her wealth of charms and favors, the listlessness of perverse man responds in ungrateful contrasts rather than in harmonies. Havana has the interest of age, with the drawbacks incident to hereditary indifference to progressive change. As in all important cities there are sharp contrasts in its quarters. With long avenues of stately mansions, marble-like and colonnaded, and exquisitely designed courtyards, there are unpaved thoroughfares with an open sewer in the mid-roadway, flanked by tenement houses with a family in each room. Most of Havana's two hundred thousand citizens live in one-story buildings, lacking conveniences which the poorest American considers necessities. The older streets are mere alleys, about twenty feet wide, of which the sidewalks take up seven. Light and ample ventilation are obtained by grated window-openings without frames or glass. The dwellings and public buildings throughout Cuba are planned to give free passage to every zephyr that wafts relief from the oppressive heat. This is not because the thermometer mounts much higher than it does in the United States, for it never touches the records of our great cities, where a hundred in the shade is not

unknown. From 80 to 50 degrees is the year's average, and it is this steady continuance of warmth that tries strength and temper.

In the better districts of Havana the driveways are twenty-three feet and the sidewalks about ten feet wide. Politeness keeps native and foreign men hopping up and down the foot deep curb to allow ladies a fair share of elbow-room on the pavements. Your guest-chamber in a well-to-do family residence has probably a window twenty by eight feet, sashless, but with several lace curtains and shutters to suit the weather. The walls are tinted with the Spaniard's eye for rich color display, the massive furniture is solid carved old mahogany, and the graceful mosquito curtains suggest experiences better left untold. House-rent is high, owing to the heavy taxation, which will doubtless be modified after American administration has put the city in a sanitary condition. Flour used to cost the poorer classes from two to three times its price in the United States.

Before we leave the capital for the interior we must note two or three of the time-mellowed edifices, which give the flavor of old-world mediævalism to the island. The gloomy Morro Castle is familiar in the chronicles of the war. It stands guard at the water-gate of the city, a grim-visaged dungeon that echoes with the despairing groans of more victims of cruel oppression than can ever be counted. A more cheerful landmark is the old Cathedral, looking as if it dates further back than 1724, cooped up in its crowded quarter. Here rest the ashes of Columbus, say the faithful, and they are probably right. He died in Spain May 20, 1506. In 1856 his bones were brought to San Domingo and from there were transferred in January, 1796, to this Cathedral, where they rest in the wall behind the bust and tablet to his memory. The

elaborate monument under the dome is a splendid work of art. Four life-size sculptured ecclesiastics bear a sarcophagus on their shoulders. There is also a supposed portrait bust on a mural tablet.

The Spanish element in the city is popularly said to be an exaggeration of the old country quality. The Tacon theatre holds three thousand people. Cafés and restaurants abound, and never lack customers. Some day Havana may be transformed into a nearer Paris, with a larger American colony than haunts the dearer city across the sea. Cuba has nearly the same area as England. The Province of Havana has a population of 452,000, of whom 107,500 are black. Large tracts of the island have not yet been explored. The long years of intermittent battling between the Cubans and Spaniards have grievously hindered progress in all directions. Nature is bountiful beyond belief, yet her overtures have been scorned, partly because of native inertia, but mainly through dread of loss. Both sides have been guilty of laying waste vast areas of cultivated land, ruining its husbandmen, capitalists and laborers alike. The millennium bids fair to come before long. Peace is restoring confidence. The reign of justice will bring capital and labor back to the soil and tempt American migration to the cities and towns, where life can be lived so enjoyably by those who bring modern methods and ideas to bear in the task of converting a man-made wilderness into an alluring paradise. Not long ago an American bought seventy acres of ground in Trinidad valley, which he cleared and planted at a cost of $3,070 for the first year. The second year's cultivation cost $1,120. He made it a banana orchard. At the end of the second year he had realized $30,680 net profit by the sale of his crop of 54,000 bunches.

Havana has the cosmopolitan air. Clubs, cafés, and entertainments abound and flourish. Its suburbs and nearby towns afford all the allurements the modern city-man seeks in country life. The rural charms of Marianao are unsurpassed in any land. Ornately simple architecture marks the columned houses of its best street. Around it are the cosy cottages in their luxuriant gardens, and beyond these the open country, a veritable Eden of foliage, flowers and fruit. In one spot a famous old banyan tree has thrown out its limbs, thrusting them deep into the soil till they have sprouted and spread over a five-acre field.

As we traverse the garden landscape in any settled part of the island, and in Porto Rico, we note the habits of the rustic native in his interesting simplicity. Poor enough in all conscience, but wonderfully contented with his crust of bread, his cigarette, the family pig, bananas for the pickaninnies' staple fare, and the frequent sips of rum which are to the West Indian laborer what beefsteak is to the American toiler. He is by no means a drunkard, and if he lacks book-learning he excels in some civic virtues of the homelier kind, and is not extravagant in his tailor-bills. The children's costume is usually that of Eve before the fall, and the apparel of a goodly family might be bought for the price of a dude's red vest.

Cock-fighting is the favorite native sport. It is encountered at any hour, anywhere. There are other sports, such as boar hunts, spearing fish, not to mention that of killing tarantulas, sand-flies, land-crabs, and the gentle crocodile. The thousand miles of steam railway in Cuba are unevenly distributed. From Havana the trip through Pinar del Rio gives an astounding revelation of the wealth of forest and soil and mines. Devastated as so much of this country was during the long years of dragging war,

its charms of scenery and possibilities of development will work its speedy salvation. A single acre of choice land has produced $3,000 worth of tobacco.

Two crops of corn and two of strawberries grow each year, vegetables and many fruits are superabundant, yet wheat and flour are imported, and cotton, besides other important staples, can be successfully cultivated.

Journeying to the charming Isle of Pines, and then south and east through Matanzas, Santa Clara, and Puerto Principe to Santiago, there is the same invitation of Nature to come and enjoy all that makes earth lovely. The island is dotted with towns large and small having much the same characteristics as Havana. Her virgin forests have some of the richest woods known to commerce. Her hills hold stores of iron, copper, coal and other minerals. Her soil is ready to yield many-fold to the courageous cultivator. When the swords have been turned into ploughshares and the spears to pruning-hooks, there will come a new day for the native Cuban. He will feel himself liberated from the hindering rancors and jealousies, inevitable in the light of recent history, which alone now stand between his beautiful island and the prosperity that hovers, waiting his encouragement to alight. Then the traveller will return with reports of Havana rejuvenated, her harbor dredged and purified, her highways paved, homes made healthy and the whole island lifted to the higher and happier plane that will give the Pearl of the Antilles its rightful setting among the other gems of God's earth.

Porto Rico, the "rich port," so named by Columbus, came gladly under the American flag. Its population of about 900,000 has had a sorry time for three hundred years. They have been steeped in spiritless poverty from first to last, so used to the oppressor's yoke that ambition seems to have been crushed. Yet their island is an earthly para-

dise, save for its rain-storms and occasional droughts. It is rich in undeveloped mineral deposits and splendid forests. Nature has helped to discourage native effort by providing the means of sustenance over-lavishly, in one sense. The people scattered through the interior find everything ready grown to hand. The bulk of the population throng the shore areas and are as listlessly happy with the minimum of life's necessaries as are the animals.

Spain has left its mark upon the island, a mark representing a civilization not to be sneered at, though not of the modern stamp. Range through the island's lovely valleys, struggle up its mountain slopes to isolated hamlets where primitive life lingers in all its bewildering unloveliness; thread the rude thoroughfare of its picturesque towns, and you will come upon replicas of the familiar Spanish church, the symbol and centre of an ever potent influence for good. With all its faults, this local haven of peace and good cheer has tempered the lot of generations that never fully realized the hopelessness of their fate. A venerable church peeping out of a leafy glade gives a touch of poetic grace to the landscape. It is something, perhaps, though not very much, that sectarian animosities do not embitter the easy minds of these peasants, who dwell together in enviable fraternity.

Porto Rico is only one of some thirteen hundred islands in the West Indies that are now in the American fold. It has several large towns that will intensely interest the traveller. San Juan, with twenty-five thousand inhabitants, is the principal city. A fine old military road runs from it across the mountains to Ponce, on the south shore. It is twenty feet wide, hard and dustless, winds along through eighty miles of scenery unsurpassed in any country, though the island is only forty miles directly across.

Every considerable town has its cathedral. That at Sabana Grande was built in 1610. Some of them have gorgeous altars and precious paintings. In one little church the figure of the Blessed Virgin is of pure gold. Another has an altar of silver.

The retail stores in the cities make little or no front display. The store is virtually a sample room, with extensive warehouses in the rear. Town life is, in its way, Parisian. The cathedral stands in a square or park, the promenade and gossiping ground for both sexes. The midday siesta is the rule, a two hours' cessation from the round of toil. The evenings are given to music and dancing, or the merry chatter of groups as they enjoy the strains of the band. The lacy mantilla adds grace to the generally captivating beauty of the women, as they cunningly drape it over their heads to take the place of hats. The palms and cocoa-nut trees, the clusters of coffee-trees, the sugar-cane, the groves of oranges, lemons, bananas, and other fruits lend great beauty to the landscape. Tobacco is largely cultivated, with plenty of inducements for a more systematic treatment of a commodity which ought greatly to increase the wealth of the island.

Since it has come under American influence many improvements have been effected. The cities are treated to the modern system of drainage, and roads have been constructed which will make traffic between the towns easier and thus encourage trade.

Exceptionally fierce hurricanes and floods wrought havoc with many plantations soon after the war. Other misfortunes plunged the always poor laboring class into absolute starvation, many of the well-to-do were ruined, and business has been severely hampered by questions of tariff arising out of the change in political status. The United

States government has done much and will continue its kindly endeavors to ameliorate the condition of these people. With the speedy return of good times there ought to be a growing stream of pleasure as well as business traffic to an island so exceptionally rich in the natural features which give fresh delight to the travelled eye and unfold a new world of charm to the fortunate ones who go abroad for the first time.

Honolulu, the capital of the Hawaiian group, has long been an American city in all but name. The geographical position of the islands destined them to come within the pale of our civilization. Within a century the natives have been transformed from a state of animalism into a self-respecting, progressive people. While the aborigines have been rapidly dying out there has been a steady influx of new blood from various sources. The population is about 120,000, immigrants from Japan and Portugal forming a considerable proportion of the laboring class. Chinese immigration has been restricted.

The traveller might almost imagine himself in some New England or Pennsylvania town as he drives through the streets of Honolulu. The capital is laid out on the American plan, the churches and houses might have been transplanted by a cyclone, and the very attire of the people in general keeps up the illusion of being at home from home. The palace of the last king and queen bears as little relation to the hut of their great predecessor, Kamehameha the First, as do the New York tailor-made suits and dresses of the citizens of Honolulu to the scanty loin-cloth which their grandparents considered the height of Sandwich Islands fashion.

More and more will these lovely isles become the pleasure-grounds for our people and for all world-tourists. The

important practical value of their annexation will be better understood if it ever becomes necessary to back up the essential principle of the Monroe Doctrine against foreign foes. As a growing metropolis Honolulu has charms of its own independent of the ideal climate and luxuriant flora of the twelve islands.

The narratives of the first travellers to Owhyee, as they styled it, glowed with descriptions of the voluptuous charms of the natives, whose life was a round of pleasure, untempered by the wholesome necessity for hard toil. It was a lotos land for all who sojourned there. The harmful consequences of unwholesome ease are not yet eradicated. Christianity has achieved almost miraculous triumphs, and the conditions of modern life in crowded communities are helping to harden the native temperament. The leper colony in Molokai is one of several sad sights which are, perhaps, better left unseen. Also the clandestine Saturnalia still kept up on the old lines, with some winking or dozing on the part of natives in authority.

Trips can be made to the surrounding islands, famous for their volcanic mountains and tropical verdure. The largest active crater in the world is that of Kilauea, being nine miles in circumference, with vertical sides about one thousand feet deep and at the bottom a lake of molten lava, boiling furiously in some parts and throwing off fibres like spun silk which float in the air. These craters are apt to break into activity without warning.

City life in Honolulu, as already remarked, can almost delude a Southerner into fancying himself at home. It is quite cosmopolitan in its degree. There are well-equipped hotels, an English library, street railways, electric lights, telephones, insurance offices, colonies and clubs of American and British lawyers, business men, physicians and journalists. Modern progress is strikingly impressed

PATRIOTISM

A photographic reproduction from one of a series of eight panels in the Library of Congress at Washington, representing "The Virtues"—Hospitality, Justice, Patriotism, Courage, Temperance, Prudence, Industry and Concord. "Patriotism" is here represented as feeding an eagle, the emblem of America, from a golden bowl, symbolizing the nourishment given by the Virtue to the spirit of the nation.

on the visitor who draws his own picture of the primitive semi-savages he expects to see, when he hears the familiar hum of mills and factories, the roar and pounding noises of foundries, and the imposing array of wharves and vessels. Hawaii is a natural hub of the wheel of world-traffic. From its ports there is a large and fast-growing steamship trade with the principal commercial centres all over the globe. We shall pass from Honolulu round to the Philippines in the easiest fashion. One is surprised at the number of Chinese and Japanese laborers in Hawaii, some of whom have prospered and own large business establishments. The foreign element in the labor field has been a source of mild trouble but is now in a fair way to solve itself. A gratifying feature is the public school system. Everywhere are centres of light and learning, promising a grand future for the island population. The abundant yield of rice, sugar, coffee, bananas, and other foodstuffs is mostly bought for the American people.

The pleasures and pains of the voyage to the Philippines have been the subject of too many public letters since the war to need re-telling. The two thousand islands which form the little-known archipelago are the homes of a number of mixed tribes, with whom the traveller will not crave intimate acquaintance for some time. In Luzon, the chief island, we may feel fairly at home, now that its all but pathless wilds, as well as its long-settled towns and hamlets, are sprinkled with American soldiers. In time, doubtless, scientific exploration will approximately fix the value of the mineral and arable fields of the archipelago. Until knowledge increases in this direction there will not be much inducement to roam among peoples with questionable manners, strange religions and outlandish dialects. The Tagal folk has reached, as regards the more

favored class, a high degree of civilization. The Malay blood has peculiarities of its own. Under long-continued Spanish rule the Luzon native has developed intellectually and nurtured an ambition for self-government. This half-amicable, half-hostile relationship between the Spanish friars, who have been the spiritual, and perhaps still more the civic, trainers and masters of the natives, is a most interesting study for the newly arrived visitor.

Landing at Manila, the commercial centre and capital of the islands, we find ourselves in a city blending the characteristics of an old-fashioned Spanish town with the mild business air of a third-rate western port. The buildings speak of the tropical perils to be encountered. Dewey's bombardment was more generous than the earthquakes and gales that smote the Cathedral. These visitations come oftener than those of angels. Houses are built low and massively on the ground floor, to insure that a one-story home shall remain when the upstairs section flies away. Terrific gales come unannounced and life is temporarily suspended until it is possible to swim into the streets and rake in the flotsam and jetsam that once lodged within your walls. Periodical rains lend variety to the novice's experience. They descend in Niagaras, giving free and wholesome baths to the many who need them and to those who need them not, and give the mud lanes that serve for streets a timely cleaning up. The rainfall record has shown as much as 114 inches in a year.

Your hotel will be the perfection of cleanliness, but the window openings are vast and glass-panes are unknown. The mahogany bedstead is bedless, a mat of woven cane strips, bare of everything that can encourage warmth or harbor little neighbors, but winged visitors float in to remind the sleeper he is not in the Waldorf-Astoria, and then depart, perhaps. By day life can be very enjoyable.

Churches, which are largely art-galleries also, fine squares and promenades, fashionable drives, town clubs and country clubs, shared by the American, English, and German business men, these and other aids to happiness flourish in Manila and suburbs.

The general aspect of Philippine scenery to the untutored eye of a stranger resembles the tropical views already described, allowance being made for differing conditions. When the fortunes of war brought the islands within our ken the principal trade was divided between Spain and outside countries. The treaty of 1898 brought the archipelago into closer trade relations, with mutual advantages. When Aguinaldo, the Tagal leader, declared his allegiance to the United States, the fact assured the establishment of a friendly arrangement which in time will bring high prosperity to the islands and civilization to their people. The two hundred thousand who live in and around Manila are mainly Christians.

Generally the natives with whom we are in closest contact are a civil and good-tempered people. Picturesque in costume, or the lack of it, they share with the scenery around the characteristic freedom from commonplace. Prolonged familiarity with modern methods of culture will take much of the charm out of life in the Philippines, replacing it, no doubt, with the practical methods which conduce to progress. A voyage to these distant islands affords a rare opportunity to trace the process of evolution from the simple and natural to the complex machinery which is grinding organized society into drab-tinted duplications of a rather uninteresting original.

WINTER AND SUMMER IN NEW ENGLAND.

HARRIET MARTINEAU.

[The "Society in America" and the "Retrospect of Western Travel," by Harriet Martineau, contain many interesting pictures of life and scenery in the United States. Of the descriptive passages of the latter work we select that detailing her experience of winter weather in Boston, which she seems to have looked upon with true English eyes, and not with the vision of one "to the manner born."]

I BELIEVE no one attempts to praise the climate of New England. The very low average of health there, the prevalence of consumption and of decay of the teeth, are evidences of an unwholesome climate which I believe are universally received as such. The mortality among children throughout the whole country is a dark feature of life in the United States. . . . Wherever we went in the North we heard of the "lung fever" as a common complaint, and children seemed to be as liable to it as grown persons.

The climate is doubtless chiefly to blame for all this, and I do not see how any degree of care could obviate much of the evil. The children must be kept warm within-doors; and the only way of affording them the range of the house is by warming the whole, from the cellar to the garret, by means of a furnace in the hall. This makes all comfortable within; but, then, the risk of going out is very great. There is far less fog and damp than in England, and the perfectly calm, sunny days of midwinter are endurable; but the least breath of wind seems to chill one's very life. I had no idea what the suffering from extreme cold amounted to till one day, in Boston, I walked the

length of the city and back again in a wind, with the thermometer seven degrees and a half below zero. I had been warned of the cold, but was anxious to keep an appointment to attend a meeting. We put on all the merinoes and furs we could muster, but we were insensible of them from the moment the wind reached us. My muff seemed to be made of ice; I almost fancied I should have been warmer without it. We managed getting to the meeting pretty well, the stock of warmth we had brought out with us lasting till then. But we set out cold on our return, and by the time I got home I did not very well know where I was and what I was about. The stupefaction from cold is particularly disagreeable, the sense of pain remaining through it, and I determined not to expose myself to it again. All this must be dangerous to children; and if, to avoid it, they are shut up through the winter, there remains the danger of encountering the ungenial spring. . . .

Every season, however, has its peculiar pleasures, and in the retrospect these shine out brightly, while the evils disappear.

On a December morning you are awakened by the domestic scraping at your hearth. Your anthracite fire has been in all night; and now the ashes are carried away, more coal is put on, and the blower hides the kindly red from you for a time. In half an hour the fire is intense, though, at the other end of the room, everything you touch seems to blister your fingers with cold. If you happen to turn up a corner of the carpet with your foot, it gives out a flash, and your hair crackles as you brush it. Breakfast is always hot, be the weather what it may. The coffee is scalding, and the buckwheat cakes steam when the cover is taken off. Your host's little boy asks whether he may go coasting to-day, and his sisters tell you what days the schools will all go sleighing. You may see boys coasting on

Boston Common all the winter day through, and too many in the streets, where it is not so safe.

To coast is to ride on a board down a frozen slope, and many children do this in the steep streets which lead down to the Common, as well as on the snowy slopes within the enclosure where no carriages go. Some sit on their heels on the board, some on their crossed legs. Some strike their legs out, put their arms akimbo, and so assume an air of defiance amid their velocity. Others prefer lying on their stomachs, and so going headforemost, an attitude whose comfort I could never enter into. Coasting is a wholesome exercise for hardy boys. Of course, they have to walk up the ascent, carrying their boards between every feat of coasting; and this affords them more exercise than they are at all aware of taking.

As for the sleighing, I heard much more than I experienced of its charms. No doubt early association has something to do with the American fondness for this mode of locomotion, and much of the affection which is borne to music, dancing, supping, and all kinds of frolic is transferred to the vehicle in which the frolicking parties are transported. It must be so, I think, or no one would be found to prefer a carriage on runners to a carriage on wheels, except on an untrodden expanse of snow. On a perfectly level and crisp surface I can fancy the smooth, rapid motion to be exceedingly pleasant; but such surfaces are rare in the neighborhood of populous cities. The uncertain, rough motion in streets hillocky with snow, or on roads consisting for the season of a ridge of snow with holes in it, is disagreeable and provocative of headache. I am no rule for others as to liking the bells; but to me their incessant jangle was a great annoyance. Add to this the sitting, without exercise, in a wind caused by the rapidity of the motion, and the list of *désagrémens* is complete.

I do not know the author of a description of sleighing which was quoted to me, but I admire it for its fidelity. "Do you want to know what sleighing is like? You can soon try. Set your chair on a spring-board out on the porch on Christmas-day; put your feet in a pailful of powdered ice; have somebody to jingle a bell in one ear, and somebody else to blow into the other with the bellows, and you will have an exact idea of sleighing."

[This quotation would appear to be a variant of Dr. Franklin's recipe for sleighing. As for Miss Martineau's experience "behind the bells," it seems to have been very unfortunate.]

If the morning be fine, you have calls to make, or shopping to do, or some meeting to attend. If the streets be coated with ice, you put on your India-rubber shoes—unsoled—to guard you from slipping. If not, you are pretty sure to measure your length on the pavement before your own door. Some of the handsomest houses in Boston, those which boast the finest flights of steps, have planks laid on the steps during the season of frost, the wood being less slippery than stone. If, as sometimes happens, a warm wind should be suddenly breathing over the snow, you go back to change your shoes, India-rubbers being as slippery in wet as leather soles are on ice. [It must be borne in mind that the writer is speaking of the rubber shoes of sixty years ago.] Nothing is seen in England like the streets of Boston and New York at the end of the season, while the thaw is proceeding. The area of the street had been so raised that passengers could look over the blinds of your ground-floor rooms; when the sidewalks become full of holes and puddles they are cleared, and the passengers are reduced to their proper level; but the middle of the street remains exalted, and the carriages drive along a ridge. Of course, this soon becomes too dangerous, and

for a season ladies and gentlemen walk; carts tumble, slip, and slide, and get on as they can; while the mass, now dirty, not only with thaw, but with quantities of refuse vegetables, sweepings of the poor people's houses, and other rubbish which it was difficult to know what to do with while every place was frozen up, daily sinks and dissolves into a composite mud. It was in New York and some of the inferior streets of Boston that I saw this process in its completeness.

If the morning drives are extended beyond the city there is much to delight the eye. The trees are cased in ice; and when the sun shines out suddenly the whole scene looks like one diffused rainbow, dressed in a brilliancy which can hardly be conceived of in England. On days less bright, the blue harbor spreads in strong contrast with the sheeted snow which extends to its very brink. . . .

The skysights of the colder regions of the United States are resplendent in winter. I saw more of the aurora borealis, more falling stars and other meteors, during my stay in New England than in the whole course of my life before. Every one knows that splendid and mysterious exhibitions have taken place in all the Novembers of the last four years, furnishing interest and business to the astronomical world. The most remarkable exhibitions were in the Novembers of 1833 and 1835, the last of which I saw. . . .

On the 17th of November in question, that of 1835, I was staying in the house of one of the professors of Harvard University at Cambridge. The professor and his son John came in from a lecture at nine o'clock, and told us that it was nearly as light as day, though there was no moon. The sky presented as yet no remarkable appearance, but the fact set us telling stories of skysights. A venerable professor told us of a blood-red heaven which

THE CATSKILLS—SUNRISE FROM SOUTH MOUNTAIN

From a Steel Plate

shone down on a night of the year 1789, when an old lady interpreted the whole French Revolution from what she saw. None of us had any call to prophesying this night. John looked out from time to time while we were about the piano, but our singing had come to a conclusion before he brought us news of a very strange sky. It was now near eleven. We put cloaks and shawls over our heads, and hurried into the garden. It was a mild night, and about as light as with half a moon. There was a beautiful rose-colored flush across the entire heavens, from southeast to northwest. This was every moment brightening, contracting in length, and dilating in breadth.

My host ran off without his hat to call the Natural History professor. On the way he passed a gentleman who was trudging along, pondering the ground. "A remarkable night, sir," cried my host. "Sir! how, sir?" replied the pedestrian. "Why, look above your head!" The startled walker ran back to the house he had left to make everybody gaze. There was some debate about ringing the college-bell, but it was agreed that it would cause too much alarm.

The Natural Philosophy professor came forth in curious trim, and his household and ours joined in the road. One lady was in her nightcap, another with a handkerchief tied over her head, while we were cowled in cloaks. The sky was now resplendent. It was like a blood-red dome, a good deal pointed. Streams of a greenish-white light radiated from the centre in all directions. The colors were so deep, especially the red, as to give an opaque appearance to the canopy, and as Orion and the Pleiades and many more stars could be distinctly seen, the whole looked like a vast dome inlaid with constellations. These skysights make one shiver, so new are they, so splendid, so mysterious. We saw the heavens grow pale, and before mid-

night believed that the mighty show was over; but we had the mortification of hearing afterwards that at one o'clock it was brighter than ever, and as light as day.

Such are some of the wintry characteristics of New England.

If I lived in Massachusetts, my residence during the hot months should be beside one of its ponds. These ponds are a peculiarity in New England scenery very striking to the traveller. Geologists tell us of the time when the valleys were chains of lakes; and in many parts the eye of the observer would detect this without the aid of science. There are many fields and clusters of fields of remarkable fertility, lying in basins, the sides of which have much the appearance of the greener and smoother of the dykes of Holland. These suggest the idea of their having been ponds at the first glance. Many remain filled with clear water, the prettiest meres in the world. A cottage on Jamaica Pond, for instance, within an easy ride of Boston, is a luxurious summer abode. I know of one unequalled in its attractions, with its flower-garden, its lawn, with banks shelving down to the mere,—banks dark with nestling pines, from under whose shade the bright track of the moon may be seen, lying cool on the rippling waters. A boat is moored in the cove at hand. The cottage itself is built for coolness, and the broad piazza is draperied with vines, which keep out the sun from the shaded parlor.

The way to make the most of a summer's day in a place like this is to rise at four, mount your horse and ride through the lanes for two hours, finding breakfast ready on your return. If you do not ride, you slip down to the bathing-house on the creek; and, once having closed the door, have the shallow water completely to yourself, carefully avoiding going beyond the deep-water mark, where no one knows how deep the mere may be. After break-

fast you should dress your flowers, before those you gather have quite lost the morning dew. The business of the day, be it what it may, housekeeping, study, teaching, authorship, or charity, will occupy you till dinner at two. You have your dessert carried into the piazza, where, catching glimpses of the mere through the wood on the banks, your watermelon tastes cooler than within, and you have a better chance of a visit from a pair of humming-birds.

You retire to your room, all shaded with green blinds, lie down with a book in your hands, and sleep soundly for two hours at least. When you wake and look out, the shadows are lengthening on the lawn, and the hot haze has melted away. You hear a carriage behind the fence, and conclude that friends from the city are coming to spend the evening with you. They sit within till after tea, telling you that you are living in the sweetest place in the world. When the sun sets you all walk out, dispersing in the shrubbery or on the banks. When the moon shows herself above the opposite woods, the merry voices of the young people are heard from the cove, where the boys are getting out the boat. You stand, with a companion or two, under the pines, watching the progress of the skiff and the receding splash of the oars. If you have any one, as I had, to sing German popular songs to you, the enchantment is all the greater. You are capriciously lighted home by fireflies, and there is your table covered with fruit and iced lemonade. When your friends have left you you would fain forget it is time to rest, and your last act before you sleep is to look out once more from your balcony upon the silvery mere and moonlit lawn.

The only times when I felt disposed to quarrel with the inexhaustible American mirth was on the hottest days of summer. I liked it as well as ever; but European strength

will not stand more than an hour or two of laughter in such seasons. I remember one day when the American part of the company was as much exhausted as the English. We had gone, a party of six, to spend a long day with a merry household in a country village, and, to avoid the heat, had performed the journey of sixteen miles before ten o'clock. For three hours after our arrival the wit was in full flow; by which time we were all begging for mercy, for we could laugh no longer with any safety. Still, a little more fun was dropped all round, till we found that the only way was to separate, and we all turned out of doors. I cannot conceive how it is that so little has been heard in England of the mirth of the Americans; for certainly nothing in their manner struck and pleased me more. One of the rarest characters among them, and a great treasure to all his sportive neighbors, is a man who cannot take a joke.

The prettiest playthings of summer are the humming-birds. I call them playthings because they are easily tamed, and are not very difficult to take care of for a time. It is impossible to attend to book, work, or conversation while there is a humming-bird in sight, its exercises and vagaries are so rapid and beautiful. Its prettiest attitude is vibrating before a blossom which is tossed in the wind. Its long beak is inserted in the flower, and the bird rises and falls with it, quivering its burnished wings with dazzling rapidity. My friend E—— told me how she had succeeded in taming a pair. One flew into the parlor where she was sitting, and perched. E——'s sister stepped out for a branch of honeysuckle, which she stuck up over the mirror. The other bird followed, and the pair alighted on the branch, flew off, and returned to it. E—— procured another branch, and held it on the top of her head; and thither also the little creatures came without fear. She next held it in her

hand, and still they hovered and settled. They bore being shut in for the night, a nest of cotton-wool being provided. Of course, it was impossible to furnish them with honeysuckles enough for food; and sugar-and-water was tried, which they seemed to relish very well.

One day, however, when E—— was out of the room, one of the little creatures was too greedy in the saucer; and, when E—— returned, she found it lying on its side, with its wings stuck to its body and its whole little person clammy with sugar. E—— tried a sponge and warm water: it was too harsh; she tried old linen, but it was not soft enough; it then occurred to her that the softest of all substances is the human tongue. In her love for her little companion she thus cleansed it, and succeeded perfectly, so far as the outward bird was concerned. But though it attempted to fly a little, it never recovered, but soon died of its surfeit. Its mate was, of course, allowed to fly away.

NIAGARA FALLS AND THE THOUSAND ISLANDS.

CHARLES MORRIS.

[Among travellers' descriptions of the natural marvels of this continent, much has been written of perhaps the greatest of them all, the celebrated cataract of the Niagara River. The Thousand Islands have also excited much admiration. Fortunately, these two scenic wonders are sufficiently contiguous to be dealt with in one record, and the compiler of the present work ventures to give his own impressions of them, from a printed statement made some twenty-five years ago.]

WHO has not read in story and seen in picture, countless times, how the water goes over at Niagara? I came here expecting to find every curve and plunge of the river appealing like a household thing to my memory. So in

great measure it proved, yet travellers never succeed in exhausting a situation in their narratives; something of the unexpected always remains to freshen the sated appetite of new-comers.

Tourists are apt to be disappointed at first sight of the cataract. Their expectations have been overwhetted; and, moreover, the first glance is usually obtained from the American shore, an edgewise view that gives but an inkling of the full majesty of the scene. Yet even from this point of view we behold the river, almost at our feet, rushing with concentrated energy to the brink of the precipice, and pouring headlong, in an agony of froth and foam, into a fearful void, from which forever rises a rainbow-crowned mist. To stand on the brink and gaze into this terrible abyss, with the foaming waters plunging in a white wall downward, is apt to rouse an undefined desire to cast one's self after the torrent, while minute by minute the mind grows into a realization of the sublimity of Niagara.

But to behold the cataract in the fulness of its might and glory one must cross to the Canadian shore, and make his way on foot from the bridge westward. Carriages will be found in abundance, manned by drivers more importunate than mellifluous; but if the tourist would see the Falls at leisure and from every point of view, he must be obdurate, and resolutely foot his way along the river's precipitous bank.

First, arriving opposite the American Fall, we seat ourselves under a tree, and gaze with admiration on this magnificent water front, spread before us in one broad, straight sheet of milk-white foam, swooping ever downward with graceful undulations, until beaten into mist on the rocks below.

Passing onward, we approach that grand curved reach of falling water, whose sublime aspect has been a fruitful

theme for poet and artist since America has had poetry and art. The Horseshoe Fall is the paragon of cataracts. Sitting on what remains of Table-Rock, and gazing on the tumbling, heaving, foaming world of waters, which seem to fill the whole horizon of vision, the mind becomes oppressed with a feeling of awe, and realizes to its full extent nature's grandest vision.

With one vast leap the broad river shoots headlong into an abyss whose real depth we are left to imagine, since the feet of the cataract are forever hidden in a white cloud of mist, shrouded in a dense veil which no eye can penetrate. At the centre of the curve, where the water is deepest, the creamy whiteness of the remainder of the cataract is replaced by a hue of deep green. It seems one vast sheet of liquid emerald, curving gracefully over the edge of the precipice, and swooping downward with endless change yet endless stability, its green tinge relieved with countless flecks of white foam.

The mind cannot long maintain its high level of appreciation of so grand a scene. The mighty monotony of the view soon loses its absorbing hold on the senses, and from sheer reaction one perforce passes to prosaic conceptions of the situation. For our part, we found ourselves purchasing popped corn from a peripatetic merchant who ludicrously misplaced the h's in his conversation, and, taking a seat above the Falls, where the edge of the rapids swerved in and broke in mimic billows at our feet, we enjoyed mental and creature comforts together.

One need but return to the American side, and cross to the islands which partly fill the river above the Falls, to obtain rest for his overstrained brain among quieter aspects of nature. Goat Island one cannot appreciate without a visit. Travellers, absorbed in the wilder scenery, rarely do justice to its peculiar charm. Instead of the contracted

space one is apt to expect, he finds himself in an area of many acres in extent, probably a mile in circumference, its whole surface to the water's edge covered with dense forest. Passing inward from its shore, scarce twenty steps are taken before every vestige of the river is lost to sight, and on reaching its centre we find ourselves, to all appearance, in the heart of a primeval forest,—only the subdued roar of the rapids reminding us of the grand scene surrounding. On all sides rise huge trunks of oaks and beeches, straight, magnificent trees, many of the beeches seemingly from six to eight feet in circumference, their once smooth bark covered inch by inch with a directory of the names of notoriety-loving visitors. At our feet wild flowers bloom, the twittering of birds is heard overhead, nimble ground-squirrels fearlessly cross our path, soft mosses and thick grass form a verdant carpet, and on all sides nature presents us one of her most charming phases, a picture from Arcadia framed in the heart of a scene of hurry and turmoil undescribable.

Near the edge of the Falls a rickety bridge leads to a small island on which stands Terrapin Tower, which yields a fine outlook upon the Horseshoe Fall, with its mists and rainbows. From the opposite side of Goat Island we pass to the charming little Luna Island, from whose brink one may lave his hand in the edge of the American Fall. From the upper end of Goat Island bridges lead to the Three Sisters. These are small, thickly-timbered islands, standing in the stream far back from the edge of the precipice, but in the very foam and fume of the rapids, the contracted stream dashing under their graceful suspension bridges with frightful speed and roar.

From the bridge joining the two outer islands one may see the rapids in their wildest aspect. Here the river, dashing fiercely onward, plunges over a shelf of rock six

or eight feet deep, and is tossed upward in so tumultuous a turmoil of foam that the heart involuntarily stops beating and the teeth set hard, as if one were preparing for a desperate conflict with the fierce power beneath him. From every point on the shore of the outer island the rapids are seen heaving and tossing as far as the sight can reach, like the waves of a sea fretted by contrary winds, here tossed many feet into the air, there sweeping fiercely over a long ledge of rocks, and ever hurrying forward with eager speed to where in the distance we see a long, curved, liquid edge, with a light mist floating upward and hovering in the air beyond it. Here one hears only the roar of the rapids. Indeed, anywhere in the nearer vicinity, the sound of the rapids is chiefly heard, the voice of the cataract itself predominating only on the Canadian side near the Horseshoe Fall.

Here, on this outreaching island, I sat for hours on the gnarled trunk of a fallen tree that overhung the water, drinking in the grandeur and glory of Niagara with a mental thirst that seemed unquenchable, and feeling in my soul that I could willingly stretch the hours into days and the days into weeks, and still descend with regret from the poetry of life into its prose.

Leaving Niagara, I took car for Lewistown, the railroad running for its whole length in full view of the river, whose lofty and rigidly-erect walls, stretching in unbroken lines for miles below the cataract, give striking evidence of the vast work performed by the stream in cutting its way, century after century, through the ridge of solid limestone that separates the lakes. Far down below the level of the railroad the water is seen, placidly winding through the deep gorge, or speeding onward in rapids, its hue intensely green, its banks as lofty and precipitous as the Palisades of the Hudson.

Before Lewistown is reached the ridge sinks to the river level. At this point the cataract began its long career, inch by inch eating its way backward through the former rapids, until they were converted into one mighty vertical downfall. At Lewistown boat is taken for Toronto, —of which city only a lake view of warehouses and church steeples is seen as we change boats for the lake journey.

For the rest of the day and evening we steamed along in full view of the Canadian shore, an ever-changing panorama of farm lands, sandy bluffs, occasional hamlets, and several towns of some pretensions to size and beauty. Kingston, a city at the head of the lake, is reached at four o'clock in the morning. Immediately after leaving this thriving town the state-rooms begin to disgorge their occupants, for we now enter the broad throat of the St. Lawrence River, and here the Thousand Islands begin. Who that has a soul beyond cakes and ale would let the desire to indulge in his own dreams cheat him from enjoying one of nature's loveliest visions?

For some four hours thereafter the boat runs through an uninterrupted succession of the most beautiful island scenery. These islands number, in fact, more than eighteen hundred, and are of every conceivable size and shape; some so minute that they seem but rock pediments to the single tree that is rooted upon their surface, while the rocky shores of others stretch for a mile or more along the channel. They are all heavily wooded, with here and there a light-house, or a rude hovel, as the only indication of man's contest with primitive nature.

[This description, it may be said, does not apply to the present time, when mansions and hotels have taken possession of many of these islands, and evidences of man's occupancy are somewhat too numerous.]

Every few turns of the wheel reveal some new feature of the scene, unexpected channels cutting through the centre of a long, wooded reach, broad open spaces studded with islets, narrow creek-like channels between rocky island shores, in which the whole river seems contracted to a slender stream, while farther on the channel expands to a mile in width, and glimpses of other channels open behind distant islands. Quick turns in our course plunge us into archipelagoes, through which a dozen channels run and wind in every direction. Sudden openings in the wooded shore along which we are swiftly gliding yield glimpses of charming islands, here closing the view, there cut by narrow channels which reveal more distant wooded shores, and lead the imagination suggestively onward till we fancy that scenes of fairy-like beauty lie hidden beyond those leafy coverts, enviously torn from our sight by the remorseless onward flight of the boat. For hours we sit in rapt delight, drinking in new beauty at every turn, and heedless of the fact that the breakfast gong has long since sounded, and the more prosaic of the passengers have allowed their physical to overcome their mental hunger.

One tall, long-whiskered old devotee of "cakes and ale," hailing from somewhere in Ohio, shaped somewhat like a note of interrogation, and sustaining his character by asking everybody all sorts of questions, did not, I am positive, digest his breakfast well, for I took a wicked pleasure in assuring him that we had passed far the most beautiful portions of the scenery while he was engaged in absorbing creature comforts, and that the world beside had nothing to compare with the fairy visions he had lost. Old Buckeye, as I had irreverently christened him, wished his breakfast was in Hades, and at once set out on a tour of interrogation to learn if he could not return by the same route and pick up the lost threads of beauty he had so idly dropped.

Another of our fellow-passengers was an English gentleman of perfect Lord Dundreary pattern, his every movement being so suggestive of those of his stage counterpart as to furnish us an unfailing source of amusement. At Prescott, Canada, a New England college boat-club came on board with their boat, and highly amused the passengers during the remainder of the journey with a long succession of comical songs. Three of them were sons of one of our venerable New England professors, one an unvenerable professor himself, yet their tanned faces, worn habiliments, and wild songs bore so strong a flavor of the backwoods that it was hard mentally to locate them within college walls.

We were roused from dinner by the announcement that the Long Sault Rapid was at hand, and gladly deserted one of the meanest tables we had ever encountered to partake of one of nature's rarest banquets.

The boat was entering what seemed a heaving sea, the waters lifting into dangerous billows, and tossing our craft with unmitigated rudeness, until it became almost impossible to retain a level footing. But the appearance of these rapids was different from what we had been led to expect. The frightful aspect of danger, the rapid downhill plunge of the boat, and all the fear-inspiring adornments of the guide-books, while they might be visible from the shore, did not appear to those on the deck. Apparently the boat was fixed in the heart of a watery turmoil, her onward motion lost in her various upward and sidelong movements, while as for fear, its only evidence lay in little shrieks full of laughter, as the equilibrium of the craft was suddenly destroyed.

Five minutes or so of this experience carried us through the perilous portion of the great rapid, and brought us into safe waters again. The St. Lawrence has various

other rapids between the Long Sault and Montreal, differing in appearance, some of them being, as far as the eye can reach, a succession of crossing and tumbling waves, which give the boat unexpected little heaves, and appear like the waves of a tossing sea. Here the water plunges rapidly down a narrow throat between two islands, there it curves round a rocky shore, on which it breaks in ocean-like billows. But the only point where danger becomes apparent to untrained eyes is at the La Chine Rapids, near Montreal, where the river runs through a narrow foaming channel between two long ridges of rock, over which the water tumbles with a terrible suggestion of peril.

The peak of Montreal mountain has been long visible, and now we rapidly approach the long line of Victoria bridge, the great pride of Canadian engineering. Under this we glide with a gymnast at the mast-head, whose erected feet seem nearly to touch the bridge; and in a short time we round in to the wharf and are ashore in the largest city of Canada.

FROM NEW YORK TO WASHINGTON IN 1866.

HENRY LATHAM.

[It is not our purpose to enter into descriptions of the cities of the United States. They are sufficiently familiar already to our readers. But Mr. Latham has given so graphic a picture of the outward aspect of the two leading coast cities and the capital of this country during a past generation that we have been tempted to quote it. It need scarcely be said that this account represents only in embryo these cities as they appear to-day.]

SAFE arrived last night, after spending twelve days of my life at sea. I say last night, as it took us so long to

land and get through the custom-house that it was dark before we reached the Fifth Avenue Hotel. But it was bright daylight and sunshine as we steamed up the splendid harbor of New York, a view which I should have been sorry to have missed. As far as our personal experiences go, the custom-house officers of New York are not half so troublesome as they are said to be. We had nothing to smuggle, but there was a vast amount of smuggling done by some of our fellow-passengers. One man landed with his pocket full of French watches, and another with a splendid Cashmere shawl round his neck. The custom-house officer, searching the next luggage to mine, unearthed two boxes of cigars; of course these were contraband. He spoke as follows: "Which are the best?" Opens box. "Have you a light? I forgot; we must not smoke here. Well, I will take a few to smoke after my supper." Takes twenty cigars, and passes the rest.

December 14, 1866.—I have been on my feet all day, delivering letters of introduction. These are plants that require to be put in early, or they are apt to flower after the sower has quitted the country. The stores of the Broadway are the most wonderfully glorified shops ever seen. Something between a Manchester warehouse and a London club-house.

I have spent all my day in going to and fro in Broadway, the wonderful street of New York; in ten years' time the finest street in the world. At present there are still so many small old houses standing in line with the enormous stores, that the effect is somewhat spoiled, by reason of the ranks not being well dressed. Broadway is now much in the condition of a child's mouth when cutting its second set of teeth,—slightly gappy. The enormous stores look even larger now than they will do when the intervals are filled up. The external splendor of the

NEW YORK AND THE BROOKLYN BRIDGE

shops is chiefly architectural; they make no great display of goods in the windows; but the large size of the rooms within enables them to set out and exhibit many times the amount of goods that an English shop-keeper shows.

The city of New York is on the southern point of Manhattan Island, having the East River running along one side, and the North River or Hudson along the other. Some day far in the future, when the present municipality is purged or swept away, and the splendor of the Thames Embankment scheme has been realized, New York will probably have two lines of quays, planted with trees and edged with warehouses, which will make it one of the finest cities in the world. The business quarter is at the point of the peninsula. The fashionable quarter is to the north, reaching every year farther inland. As the city increases, the stores keep moving northward, taking possession of the houses, and driving the residents farther back. The land is not yet built over up to Central Park, said to be called so because it will be the future centre of the city that is to be.

The concentrated crowd that passes along Broadway in the morning "down-town" to its business, and back in the evening "up-town" to its homes, is enormous; but the pavements are bad for men and abominable for horses: to-day I saw five horses down, and two lying dead. At the same time, allowance must be made for the fact that it has been snowing and thawing and freezing again; but as this is no uncommon state of things in this climate, why pave the streets with flat stones that give no foothold? The "street-cars" are the universal means of conveyance. These are omnibuses running on tramways, but the name of omnibus is unknown: if you speak of a "bus" you are stared at. A young New Yorker, recently returned from London, was escorting his cousin home one evening; as

the way was long, he stopped and said, "Hold on, Mary, and let's take a bus." "No, George, not here in the street," the coy damsel replied. . . .

We went to-day to the top of Trinity Church tower; a beautiful panorama, with the bay of New York to the south, the city stretching away northward, and a great river on either side. But it was bitterly cold at the top, as we had heavy snow yesterday, and the wind was blowing keenly. We went also to the Gold Exchange, and gold happened to be "very sensitive" this morning, in consequence of some rumors from Mexico which made it possible that the time for United States interference was nearer than had been supposed. The noise was deafening; neither the Stock Exchange nor the ring at Epsom at all approach it. All the men engaged in a business which one would suppose required more experience than any other, the buying and selling of gold, seemed to be under twenty-five years of age; most of them much younger, some quite boys. The reason given me was that older heads could not stand the tumult, all gesticulating, all vociferating, every man with a note-book and pencil, crowded round a ring in the centre of the hall like a little cock-pit, to which you descend by steps. Every now and then a man rushes out of the telegraph corner with some news, which oozes out and makes the crowd howl and seethe again. The hands of a big dial on the wall are moved on from time to time, marking the hour of the day and the price of gold. This is the dial of the barometer of national prosperity, marked by gold instead of mercury. . . .

A huge sum of money has been laid out on Central Park, the Bois de Boulogne of New York. When the timber has grown larger it will be very pretty. The ground is rocky, with little depth of soil in it; this makes it difficult to get the trees to grow, but, on the other hand, gives the place a

feature not to be found in our parks or at the Bois, in the large masses of brown sandstone cropping up through the turf here and there, and in the rocky shores of the little lakes.

In the evening we went, by invitation of our courteous banker, to the Assembly at Delmonico's rooms. In this we consider ourselves highly honored and introduced to the best society of New York. The toilets and the diamonds were resplendent, and one figure of the "German" (cotillon), in which the ladies formed two groups in the centre, facing inward with their bright trains spread out behind them, was a splendid piece of color and costume. Prince Doria was there, and most of the magnates of the city looked in. Some of the wealthiest people in the room were pointed out to me as the present representatives of the families of the old Dutch settlers; those are the pedigrees respected here.

December 20, 1866.—We left New York, having stayed exactly a week, and meaning to return again. By rail to Philadelphia, ninety-two miles, through a flat, snow-covered country, which, under the circumstances, looked as dismal as might be. The latter part of our journey lay along the left bank of the Delaware, which we crossed by a long wooden bridge, and arrived at the Continental Hotel just at dusk. It is evident we are moving South. The waiters at this hotel are all darkies.

December 21, 1866.—Philadelphia is a most difficult town just now for pedestrians, the door-steps being all of white marble glazed with ice, and sliding on the pavement may be had in perfection. Spent the best part of the day in slipping about, trying to deliver letters of introduction. The system of naming the streets of Philadelphia and of numbering the houses is extremely ingenious, and answers perfectly when you have made yourself acquainted with

it; but as it takes an ordinary mind a week to find it out, the stranger who stops four or five days is apt to execrate it. All the streets run at right angles to one another, so that a short cut, the joy of the accomplished Londoner, is impossible. It is a chess-board on which the bishop's move is unknown. Nothing diagonal can be done. The city is ruled like the page of a ledger, from top to bottom with streets, from side to side with avenues. It is all divided into squares. When you are first told this, a vision arises of the possibility of cutting across these squares from corner to corner. Not a bit of it: a square at Philadelphia means a solid block of houses, not an open space enclosed by buildings. When you have wandered about for some time, the idea suggests itself that every house is exactly like the house next to it; although the inhabitants have given up the old uniformity of costume, the houses have not; and without this elaborate system of numbering, the inhabitants of Philadelphia would never be able to find their way home.

Nevertheless, if that is the finest town in which its inhabitants are best lodged, Philadelphia is the finest town in the world. It lodges a much smaller population than that of New York in more houses. In no other large town are rents comparatively so cheap. Every decent workingman can afford to have his separate house, with gas and water laid on, and fitted with a bath.

We have been making a study of the negro waiters. Perhaps cold weather affects them; but the first thing about them that strikes you is the apathetic infantine feeble-mindedness of the "colored persons" lately called niggers. I say nothing of the seven colored persons, of various shades, who always sit in a row on a bench in the hall, each with a little clothes-brush in his hand, and never attempt to do anything; I allude to those who minister to

my wants in the coffee-room with utterly unknown dishes. I breakfasted yesterday off dunfish and cream, Indian pudding, and dipped toast; for dinner I had a baked blackfish with soho sauce, and stewed venison with port wine; for vegetables, marrow, squash, and stewed tomatoes; and for pudding, "floating island."

You see there is something exciting about dinner. After you have ordered four courses of the unknown, and your colored person has gone in the direction of the kitchen, you sit with the mouth of expectation wide open. Sometimes you get grossly deceived. Yesterday F—— ordered "jole," and was sitting in a state of placid doubt, when his colored person returned with a plate of pickled pork. At present I am quite of the opinion of the wise man who discovered that colored persons are born and grow in exactly the same way as uncolored persons up to the age of thirteen, and that they then cease to develop their skulls and their intelligence. All the waiters in this hotel appear to be just about the age of thirteen. There are two who in wisdom are nearly twelve, and one gray-headed old fellow who is just over fourteen.

[Our traveller contented himself in the way of sight-seeing by following Charles Dickens's path to the Penitentiary, and afterwards visited Girard College. He concludes as follows:]

Even in this city of Penn the distinctive marks of Quakerism are dying out. The Quaker dress does not seem much more common in Philadelphia than in any other city, nor do they use the "thee" and "thou" in the streets; but at their own firesides, where the old people sit, they still speak the old language. A Quaker in the streets is not to be distinguished from other Philadelphians. I was talking to Mr. C—— about this, and he said, "Let me introduce you to a Quaker; I am a member of the church

myself." L—— was not quite clear whether he was a Quaker or not. His parents had been; his sons certainly were not. Some of the best of the Southern soldiers came from the city of the Quakers. There is a story of a Quaker girl, who was exchanging rings with her lover as he set off to join the army; when they parted she said, "Thee must not wear it on thy trigger-finger, George."

Dined with Mr. L——, the publisher. He showed us over his enormous store, which seemed to be a model of discipline and organization, and described the book-market of America as being, like the Union, one and indivisible, and opened his ledger, in which were the names of customers in every State in the Union. He told us that he had about five thousand open accounts with different American booksellers. His policy is to keep in stock everything that a country bookseller requires, from a Bible to a stick of sealing-wax, so that when their stores get low they are able to write to him for everything they want. He contends, as other Philadelphians do, that New York is not the capital of America, but only its chief port of import, and that Philadelphia is the chief centre for distribution. Mr. Hepworth Dixon had been here not long before, and, as was right and fitting in the city of Quakers, a high banquet had been held in honor of the vindicator of William Penn.

[Thence Mr. Latham went to Baltimore, of which he describes the following old-time experience: "When an American train reaches a town it does not dream of pulling up short in a suburb, but advances slowly through the streets; the driver on the engine rings a large bell, and a man on horseback rides in front to clear the way. Thus we entered Baltimore, arrived at the terminus and uncoupled the engine; and then, still sitting in the railway-car, were drawn by a team of horses along the street-rails to the terminus of the Baltimore and Ohio Railway on the other side of the town." He is talking of antediluvian days. We have reformed all that. After some experience in duck

and partridge shooting, and a taste of terrapin soup, he proceeded to Washington. Of his varied experience there we can give but a single out-door example.]

We went this morning over the Capitol, an enormous edifice still in progress; parts of it are continually built on to, and rebuilt, to meet the wants of the legislature. The two new white marble wings are very beautiful and nearly complete, and the dome is on the same scale with them, and of the same material. The centre is now out of proportion since the wings were built, and is of stone, painted white to match the rest in color and preserve it from the frost. If the South had succeeded in seceding it might have sufficed; but now it is bound to grow, and Congress are going to vote the amount of dollars necessary to make the Capitol complete. When completed it will be magnificent.

We are very unlucky in seeing these great marble palaces (for several of the public buildings of Washington are of this material) with the snow upon the ground. Against the pure white snow they appear dingy; under a summer sun they must show to far greater advantage. What ancient Athens appeared like, surrounding its marble temples, I can hardly realize; but the effect of the splendid public buildings in Washington is very much detracted from by the sheds and shanties which are near them. The builders of Washington determined that it should be a great city, and staked out its streets accordingly twice the width and length of any other streets: rightly is it named the city of magnificent distances. But although the Potomac is certainly wide enough, and apparently deep enough, to justify a certain amount of trade, and its situation is more central than that of Philadelphia, the town has never grown to fill the outlines traced for it.

To make a Washington street, take one marble temple or

public office, a dozen good houses of brick, and a dozen of wood, and fill in with sheds and fields. Some blight seems to have fallen upon the city. It is the only place we have seen which is not full of growth and vitality. I have even heard its inhabitants tell stories of nightly pig-hunts in the streets, and of the danger of tumbling over a cow on the pavement on a dark night; but this must refer to by-gone times.

One of the most curious and characteristic of the great public buildings of Washington is the Patent Office, in which a working model is deposited of every patent taken out in the United States for the improvement of machinery.

This assemblage of specimens is an exhibition of which all Americans are proud, as a proof of the activity of American ingenuity working in every direction. Capacity to take out a patent is a quality necessary to make up the character of the perfect citizen. Labor is honorable, but the man who can invent a labor-saving machine is more honorable; he has gained a step in the great struggle with the powers of nature. An American who has utilized a water-power feels, I take it, two distinct and separate pleasures: first, in that dollars and cents drip off his water-wheel, and, secondly, in that he has inveigled the water-sprites into doing his work. If you tell an American that you are going to Washington, his first remark is not, "Then you will see Congress sitting," but, "Mind you go and see the Patent Office."

THE NATURAL BRIDGE AND TUNNEL OF VIRGINIA.

EDWARD A. POLLARD.

[The Old Dominion—to give Virginia its home title—is full of natural wonders, some of them unsurpassed in beauty and attractiveness elsewhere in the world. In number and variety of mineral springs it stands unequalled; its caverns, Luray and Weyer's, are rich in charms of subterranean scenery; and its two remarkable examples of nature's grandeur, the Natural Bridge and Natural Tunnel, are unique in their peculiar characteristics. Edward A. Pollard, in his "Virginia Tourist," has ably described the various attractions of the Old Dominion, and we select from this work his word picture of the Natural Bridge. He made his way thither from Lynchburg, *via* the James River Canal.]

As the traveller enters the gap of the Blue Ridge from the east, the winding courses of the stage-coach carry him up the mountain's side until he has gained an elevation of hundreds of feet above the James River, over the waters of which the zigzag and rotten road hangs fearfully. On every side are gigantic mountains hemming him in; there are black ravines in the great prison-house; and the lengthened arms of the winds smite the strained ear with the sounds of the rapids below. While he looks at the distance, a mountain rivulet, slight and glittering from amid the primeval forest, dashes across his path, and, leaping from rock to rock, goes joyously on its way.

On the North River the scenes are quieter. Emerging here, the traveller sees a beautiful and fertile country opening before him, while still westward the blue outlines of distant mountains in Rockbridge bound his vision. The water landscape is beautiful. Lovely valleys debouch upon the stream; there are peaceful shadows in the steel-

blue waters, and on the broad shoulders of the cattle on the banks we see the drapery of the shadows of the trees beneath which they rest. The fisherman standing leg-deep in the water can see his face as in a mirror.

But at present our way does not lie through these scenes. The canal-boat is taking us along the James in the moonlit night, and by the time the day has broken we are within two miles of the Natural Bridge. A rickety team awaits us at the lock-house where we disembark. Through an air filled with golden vapor, and with the mists of the morning yet hanging in the trees by the wayside, we proceed on our journey. The old stage-coach lumbers along under the thick, overhanging boughs of the forest pines, which ever and anon scrape its top or strike in through the windows, scattering the dew-drops in the very faces of the passengers, or perhaps smiting their cheeks with their sharp-pointed leaves.

The first view of the bridge is obtained half a mile from it at a turn on the stage-road. It is revealed with the suddenness of an apparition. Raised a hundred feet above the highest trees of the forest, and relieved against the purple side of a distant mountain, a whitish-gray arch is seen, in the effect of distance as perfect and clean-cut an arch as its Egyptian inventor could have defined. The tops of trees are waving in the interval, the upper half of which we only see, and the stupendous arch that spans the upper air is relieved from the first impression that it is man's masonry, the work of art, by the fifteen or twenty feet of soil that it supports, in which trees and shrubbery are firmly embedded,—the verdant crown and testimony of nature's great work. And here we are divested of an imagination which we believe is popular, that the bridge is merely a huge slab of rock thrown across a chasm, or some such hasty and violent arrangement. It is no such thing. The

PENNSYLVANIA AVENUE, WASHINGTON

SOLARI'S
HOTEL
FITCH, FOX & BROWN

arch and whole interval are contained in one solid rock; the average width of that which makes the bridge is eighty feet, and beyond this the rock extends for a hundred feet or so in mural precipices, divided by only a single fissure, that makes a natural pier on the upper side of the bridge, and up which climb the hardy firs, ascending step by step on the noble rock-work till they overshadow you.

This mighty rock, a single mass sunk in the earth's side, of which even what appears is stupendous, is of the same geological character,—of limestone covered to the depth of from four to six feet with alluvial and clayey earth. The span of the arch runs from forty-five to sixty feet wide, and its height to the under line is one hundred and ninety-six feet, and to the head two hundred and fifteen feet. The form of the arch approaches to the elliptical; the stage-road which passes over the bridge runs from north to south, with an acclivity of thirty-five degrees, and the arch is carried over on a diagonal line,—the very line of all others the most difficult for the architect to realize, and the one best calculated for picturesque effects. It is the proportions of art in this wild, strange work of nature, its adjustment in the very perfection of mechanical skill, its apparently deliberate purpose, that create an interest the most curious and thoughtful. The deep ravine over which it sweeps, and through which traverses the beautiful Cedar Creek, is not otherwise easily passed for several miles, either above or below the bridge. It is needful to the spot, and yet so little likely to have survived the great fracture, the evidences of which are visible around, and which has made a fissure of about ninety feet through the breadth of a rock-ribbed hill, that we are at first disposed to reflect upon it as the work of man. It is only when we contemplate its full measure of grandeur that we are assured it is the work of God. We have the pier, the arch,

the studied angle of ascent; and that nothing might be wanted in the evidences of design, the bridge is guarded by a parapet of rocks, so covered with fine shrubs and trees that a person travelling the stage-road running over it would, if not informed of the curiosity, pass it unnoticed.

But let him approach through the foliage to the side. More than two hundred feet below is the creek, apparently motionless, except where it flashes with light as it breaks on an obstruction in the channel; there are trees, attaining to grander heights as they ascend the face of the pier; and far below this bed of verdure the majestic rock rises with the decision of a wall, and the spectator shrinks from contemplating the grand but cruel depths, and turns away with dizzy sensations. But the most effective view is from the base of the bridge, where you descend by a circuitous and romantic path. Even to escape from the hot sun into these verdant and cool bottoms is of itself a luxury, and it prepares you for the deliberate enjoyment of the scene. Everything reposes in the most delightful shade, set off by the streaming rays of the sun, which shoot across the head of the picture far above you, and sweeten with softer touches the solitude below.

Standing by the rippling, gushing waters of the creek, and raising your eyes to the arch, massive and yet light and beautiful from its height, its elevation apparently increased by the narrowness of its piers and by its projection on the blue sky, you gaze on the great work of nature in wonder and astonishment. Yet a hundred beauties beckon you from the severe emotion of the sublime. When you have sustained this view of the arch raised against the sky, its black patches here and there shaped by imagination into grand and weird figures,—among them the eagle, the lion's head, and the heroic countenance of Washington; when you have taken in the proportions and circumstances

of this elevated and wide span of rock,—so wide that the skies seem to slope from it to the horizon,—you are called to investigate other parts of the scene which strain the emotions less, and are distributed around in almost endless variety.

Looking through the arch, the eye is engaged with a various vista. Just beyond rises the frayed, unseamed wall of rock; the purple mountains stand out in the background; beneath them is a rank of hills and matted woods enclosing the dell below, while the creek coursing away from them appears to have been fed in their recesses. A few feet above the bridge the stream deflects, and invites to a point of view of the most curious effect. Taking a few steps backward, moving diagonally on the course of the stream, we see the interval of sky between the great abutments gradually shut out; thus apparently joined or lapped over, they give the effect of the face of a rock, with a straight seam running down it, and the imagination seizes the picture as of mighty gates closed upon us. We are shut in a wild and perturbed scene by these gates of hell; behind and around us is the contracted and high boundary of mountains and hills, and in this close and vexed scene we are for a moment prisoners.

Now let us move across, step by step, to a position fronting where these gates apparently close. Slowly they seem to swing open on unseen and noiseless hinges; wider and wider grows the happy interval of sky, until at last wide open stands the gate-way raised above the forest, resting as it were on the brow of heaven,—a world lying beyond it, its rivers and its hills expanding themselves to the light and splendor of the unshadowed day.

To an observer of both places a comparison is naturally suggested between the Natural Bridge and Niagara Falls in respect of the sublime and the beautiful; and, indeed,

as in this respect the two greatest works of nature on this continent, they may well be used as illustrations in our American schools of æsthetics. The first is unique in its aspects of nature like art; it is nature with the proportions of art. In its expressions of power, in its concentration of emotion, as when we look at it distinct or complete, it is truly sublime; and its effect is alleviated (for it is a maxim in æsthetics that the sublime cannot be long sustained) by the picturesque scenery which surrounds it. It is a greater natural curiosity and more wonderful than Niagara, although it lacks the elements of sublimity which the other has in sound, and of the visible, actual struggle in which it displays the powers of nature. Niagara is a living thing, while the Natural Bridge is *monumental.* The first represents the sublime as allied to the terrific,—in contemplating it we are overwhelmed with a sense of our insignificance; while the Natural Bridge associates the sublime with the pleasing and curious, and, not transporting us as violently as Niagara, entertains us more equably, and dismisses us, we think, with more distinct and fruitful perceptions of the grandeur and beneficence and variety of nature which have been distributed in the picture.

[Washington, a century and a half ago, carved his name at a high elevation on the rock walls of the abyss. In 1818 these walls were climbed to the top by James H. Piper, a student of Washington College, Virginia. The narrative here given of this daring feat is from the pen of William A. Caruthers.]

Mr. Piper, the hero of the occasion, commenced climbing on the opposite side of the creek from the one by which the pathway ascends the ravine. He began down on the banks of the brook so far that we did not know where he had gone, and were only apprised of his whereabouts by his shouting above our heads. When we looked up, he was

standing apparently right under the arch, I suppose a hundred feet from the bottom, and that on the smooth side, which is generally considered inaccessible without a ladder. He was standing far above the spot where General Washington is said to have inscribed his name when a youth. The ledge of the rock by which he ascended to this perilous height does not appear from below to be three inches wide, and runs almost at right angles to the abutment of the bridge. . . .

The ledge of rock on which he was standing appeared so narrow to us below as to make us believe his position a very perilous one, and we earnestly entreated him to come down. He answered us with loud shouts of derision. . . .

He soon after descended from that side, crossed the brook, and commenced climbing on the side by which all visitors ascend the ravine. He first mounted the rocks on this side, as he had done on the other, far down the abutment, but not so far as on the opposite side. The projecting ledge may be distinctly seen by any visitor. It commences four or five feet from the pathway on the lower side, and winds round, gradually ascending, until it meets the cleft of rock over which the celebrated cedar stump hangs. Following this ledge to its termination, it brought him thirty or forty feet from the ground, and placed him between two deep fissures, one on each side of the gigantic column of rock on which the aforementioned cedar stump stands.

This column stands out from the bridge, as separate and distinct as if placed there by nature on purpose for an observatory to the wonderful arch and ravine which it overlooks. A huge crack or fissure extends from its base to the summit; indeed, it is cracked on both sides, but much more perceptibly on one side than the other. Both of these fissures are thickly overgrown with bushes, and numerous

roots project into them from trees growing on the precipice. It was between these that the aforementioned ledge conducted him. Here he stopped, pulled off his coat and shoes and threw them down to me. And this, in my opinion, is a sufficient refutation of the story so often told, that he went up to inscribe his name, and ascended so high that he found it more difficult to return than to go forward. He could have returned easily from the point where he disencumbered himself, but the fact that he did thus prepare so early, and so near the ground, and after he had ascended more than double that height on the other side, is clear proof that to inscribe his name was not, and to climb the bridge was, his object. He had already inscribed his name above Washington himself more than fifty feet.

Around the face of this huge column, and between the clefts, he now moved backward and forward, still ascending as he found convenient foothold. When he had ascended about one hundred and seventy feet from the earth, and had reached the point where the pillar overhangs the ravine, his heart seemed to fail him. He stopped, and seemed to us to be balancing midway between heaven and earth. We were in dread suspense, expecting every moment to see him dashed in atoms at our feet. We had already exhausted our powers of entreaty in persuading him to return, but all to no purpose. Now it was perilous even to speak to him, and very difficult to carry on conversation at all, from the immense height to which he had ascended, and the noise made by the bubbling of the little brook as it tumbled in tiny cascades over its rocky bed at our feet. At length he seemed to discover that one of the clefts before mentioned retreated backward from the overhanging position of the pillar. Into this he sprang at once, and was soon out of sight and out of danger.

There is not a word of truth in all that story about our

hauling him up with ropes, and his fainting away so soon as he landed on the summit. Those acquainted with the localities will at once perceive its absurdity; for we were beneath the arch, and it is half a mile round to the top, and for the most part up a rugged mountain. Instead of fainting away, Mr. Piper proceeded down the hill to meet us and obtain his hat and shoes. We met about half-way, and then he lay down for a few moments to recover himself of his fatigue.

[Virginia possesses another marvel of nature's handiwork of the same general character as the Natural Bridge, and of which Mr. Pollard's description may here fitly be given.]

After progressing about three miles from the ford of the Clinch River, and after having repeatedly crossed its crooked tributary, Stock Creek, we come to a small mountain or globular hill which is our wondrous destination, for here is the Natural Tunnel. There is nothing which advertises in advance this great wonder, or in any way excites the expectations of the traveller. There is a common road, from which we depart a few hundred yards to make a half circuit of the base of the mountain, that goes clean over the ridge, leading to a settlement some miles farther, called Rye Cove, and which was once the abode of a fierce Indian tribe. This main road goes over the arch of the tunnel, furnishing a curious convenience to the traveller, of which he would be unaware, seeing nothing through the foliage but glimpses of the mural rocks that guard and sustain the termination of the secret passage-way many hundred feet below him. It is from this convenience that the neighboring people name the gigantic work of nature we are proceeding to explore a natural bridge. But this name is certainly insufficient and paltry for a rock-work that on one flank at least extends

some eight hundred feet, and which, if regarded with reference to the breadth of the interval it spans, is, in fact, a complication of bridges, arranged, as we shall presently see, in one single massive spectacle.

The western face of the tunnel, near which we dismount, continues partly concealed from view, or is imperfectly exposed, until we nearly approach it, the immense rock which is perforated being here dressed with the thick foliage of the spruce-pine, and the harsh surface adorned with a beautiful tracery of vines and creepers. At last is seen the entrance of what appears to be a huge subterraneous cavern or grotto, into which the stream disappears; a towering rock rising here about two hundred feet above the surface of the stream, and a rude entrance gouged into it, varying in width, as far as the eye can reach, from one hundred to one hundred and fifty feet, and rising in a clear vault from seventy to eighty feet above the floor. The view here terminates in the very blackness of darkness; it is broken on the first curve of the tunnel. The bed of the stream, from which the water has disappeared on account of the drouth, the reduced currents sinking to lower subterranean channels, is piled with great irregular rocks, on the sharp points of which we stumble and cut our hands: there is no foothold but on rocks, and it is only when we have struggled through the awful, cruel darkness, holding up some feeble lights in it, and issued into the broad sunshine, that we find we have travelled nearly two hundred yards (or say, more exactly, five hundred feet) through one solid rock, in which there is not an inch of soil, not a seam, not a cleft, and which, even beyond the debouchure of the tunnel, yet runs away a hundred yards in a wall five hundred feet high, as clean and whetted as the work of the mason.

But we must not anticipate this majestical scene, "won-

derful beyond all wondrous measure." Happily, in entering the tunnel from the western side we have adopted the course of exploration which affords a gradual ascent of the emotions, until at last they tower to the standard of a perfect sublimity. The course of the tunnel may be described as a continuous curve: it resembles, indeed, a prostrate *s*. For a distance of twenty yards midway of this course we are excluded from a view of either entrance, and the darkness is about that of a night with one quarter of the moon. The vault becomes lower here—in some places scarcely more than thirty feet high—and springs immediately from the floor. The situation is awful and oppressive: the voice sounds unnatural, and rumbles strangely and fearfully along the arch of stone. We are encoffined in the solid rock: there is a strange pang in the beating heart in its imprisonment, so *impenetrable*, black, hopeless, and we hurry to meet the light of day. In that light we are disentombed: we cast off the confinements of the black space through which we have passed, and we are instantly introduced to a scene so luminous and majestic that in a moment our trembling eyes are captivated and our hearts lifted in unutterable worship of the Creator's works.

It is that sheer wall of rock which we have already mentioned, where the arch and other side of the tunnel break away into the mountain slope; a high wall, slightly impending; an amphitheatre, extending one hundred yards, of awful precipices; a clean battlement, without a joint in it, five hundred feet high. And this splendid height and breadth of stone, that a thousand storms have polished, leaving not a cleft of soil in it,—this huge, unjointed masonry raised against the sky, gray and weather-stained, with glittering patches of light on it,—is yet part of the same huge rock which towered at the farther end of the

tunnel, and through whose seamless cavity we have travelled two hundred yards. It is in this view that the mystery of the scene seizes the mind, and the last element of sublimity is added to it. It is in this view that the Natural Tunnel we had come to see as a mere "curiosity" takes rank among the greatest wonders of the world. What power, what possible imaginable agency of nature, could have worked out this stupendous scene? . . .

Turning our eyes away from the battlement of rock to the opposite side of the ravine, a new revelation of the grand and picturesque awaits us. Here a gigantic cliff, but one broken with rock and soil, and threaded to its summit by a sapling growth of the buckeye, the linden, and the pine, rises almost perpendicularly from the water's edge to a height almost equal to that of the opposite wall of rock. A natural platform is seen to project over it, and yet a few yards farther there is an insulated cliff, a cyclopean *chimney*, so to speak, scarcely more than a foot square at its top, rising in the form of a turret at least sixty feet above its basement, which is a portion of the imposing cliff we have mentioned. It is at once perceived that here are two points of view that will give us new and perhaps the most imposing aspects of the scene. To attain these points, however, it is necessary to make a circuit of half a mile; and the sinking sun admonishes us to defer this new interest of the scene until to-morrow. . . .

We remounted for the tunnel in the early morning, and were soon to find that the rising sun was to give a new and unexpected glory to the scene. This time we ascend the mountain instead of deflecting as before. The road is easy; there are no difficulties of access to the points of view from the top of the tunnel, and they are undoubtedly the grandest. We pass to the platform before described by a few steps from the main road. It is a slab of rock projecting from an

open patch of ground; a dead cedar-tree is standing at its edge, throwing its gnarled and twisted arms, as in wild and widowed sorrow, over the awful scene below. We now see the great opposite amphitheatre of rock in added grandeur, for we see it from above,—we see it across a chasm nine hundred feet wide and five hundred feet deep, and the exposure being almost exactly eastern, the long spears of the rising sun are being shattered on it. The effect is inexpressibly grand. But there is one more circumstance to be added to the scene; we do not see from this observatory the arch, the entrance of the tunnel. A few yards farther the fearful chimney-shaped rock invites to a more commanding view, but the ascent is dangerous; the stone on top is loose, and so narrow that two persons can scarcely stand on it. A single misstep, a moment's loss of balance, and we would fall into eternity. But now the sense of peril is lost, or is rather mingled, in the grandeur of the scene. It is a panoramic view. We have now the whole sweep of the mural precipice opposite; the sun's glitter is incessant on the polished stone; the trees which fringe the bottom appear now scarcely more than shrubs; the entrance of the tunnel has now come into view, and that which yesterday we thought so high and wide, now appears, from our amazing height, as a stooped door-way. We imagine the gloomy entrance into a cave of Erebus and Death, the broken rocks lying within which look like black and mangled entrails. It is a fearful picture,—it is that of a supernatural abode.

[This marvel of nature is not without its tradition,—one of Indian origin,—in which is repeated, with suitable variations, the familiar Lover's Leap narrative. A more prosaic and modern interest attaches to it, in its having been chosen as the route of a railroad, nature's contribution of a passage through a difficult mountain wall.]

PLANTATION LIFE IN WAR TIMES.

WILLIAM HOWARD RUSSELL.

[Russell, of former celebrity as war correspondent of *The Times*, visited the seceded States during the early period of the American Civil War. His letters thence, published later as "Pictures of Southern Life," are full of graphic descriptions of scenes and feelings in the Confederate States during the era of enthusiasm and hopefulness, before the war had borne its harvest of doubt and misery. It is not our purpose, however, to give his experiences in this special field. It is travel, not war, with which we are concerned, and we confine ourself to an account of a visit to a plantation in the vicinity of Charleston. A short preliminary sketch of the ebb and flow of rumor in war times, however, may be of interest.]

THE rolling fire of the revolution is fast sweeping over the prairie, and one must fly before it or burn. I am obliged to see all that can be seen of the South at once, and then, armed with such safeguards as I can procure, to make an effort to recover my communications. Bridges broken, rails torn up, telegraphs pulled down,—I am quite in the air, and air charged with powder and fire. One of the most extraordinary books in the world could be made out of the cuttings and parings of the newspapers which have been published within the last few days. The judgments, statements, asseverations of the press, everywhere necessarily hasty, ill-sifted, and off-hand, do not aspire to even an ephemeral existence here. They are of use if they serve the purpose of the moment, and of the little boys who commence their childhood in deceit, and continue to adolescence in iniquity, by giving vocal utterance to the "sensation" headings of the journals they retail so sharply and so curtly.

Talk of the superstition of the Middle Ages, or of the credulity of the more advanced period of rural life; laugh at the Holy Coat of Treves, or groan over the Lady of Salette; deplore the faith in winking pictures, or in a *communiqué* of the *Moniteur;* moralize on the superstition which discovers more in the liquefaction of the ichor of St. Gennaro than a chemical trick; but if you desire to understand how far faith can see and trust among the people who consider themselves the most civilized and intelligent in the world, you will study the American journals, and read the telegrams which appear in them.

One day the Seventh New York Regiment is destroyed for the edification of the South, and is cut up into such small pieces that none of it is ever seen afterwards. The next day it marches into Washington or Annapolis, all the better for the process. Another, in order to encourage the North, it is said that hecatombs of dead were carried out of Fort Moultrie, packed up, for easy travelling, in boxes. Again, to irritate both, it is credibly stated that Lord Lyons is going to interfere, or that an Anglo-French fleet is coming to watch the ports; and so on, through a wild play of fancy, inexact in line, as though the batteries were charged with the aurora borealis or summer lightning, instead of the respectable, steady, manageable offspring of acid and metal. . . .

I am now, however, dealing with South Carolina, which has been the *fons et origo* of the secession doctrines and their development into the full life of the Confederate States. The whole foundation on which South Carolina rests is cotton and a certain amount of rice; or rather she bases her whole fabric on the necessity which exists in Europe for those products of her soil, believing and asserting, as she does, that England and France cannot and will not do without them. Cotton, without a market, is so

much flocculent matter encumbering the ground. Rice, without demand for it, is unsalable grain in store and on the field. Cotton at ten cents a pound is boundless prosperity, empire, and superiority, and rice and grain need no longer be regarded.

In the matter of slave labor, South Carolina argues pretty much in this way: England and France require our products. In order to meet their wants we must cultivate our soil. There is only one way of doing so. The white man cannot live on our land at certain seasons of the year; he cannot work in the manner required by the crops. He must, therefore, employ a race suited to the labor, and that is a race which will only work when it is obliged to do so.

[And so on throughout the old argument, which, fortunately, the logic of time has in great measure disproved. But, leaving this phase of the subject, we shall accompany our traveller on a visit to the land of rice and slave labor.]

Early one morning I started in a steamer to visit a plantation in the Pedee and Maccamaw district, in the island coast of the State, north of Charleston. Passing Sumter, on which men are busily engaged, under the Confederate flag, in making good damages and mounting guns, we put out a few miles to sea, and with the low sandy shore, dotted with soldiers and guard-houses and clumps of trees, on our left, in a few hours pass the Santee River, and enter an estuary into which the Pedee and Maccamaw run a few miles farther to the northwest.

The steamer ran alongside a jetty and pier, which was crowded by men in uniform, waiting for the news and for supplies of creature comforts. Ladies were cantering along the fine hard beach, and some gigs and tax-carts, fully laden, rolled along very much as one sees them at Sear-

borough. The soldiers on the pier were all gentlemen of the county. Some, dressed in gray tunics and yellow facings, in high felt-hats and plumes and jack-boots, would have done no discredit in face, figure, and bearing to the gayest cavaliers who ever thundered at the heels of Prince Rupert. Their horses, full of Carolinian fire and mettle, stood picketed under the trees along the margin of the beach. Among these men, who had been doing the duty of common troopers in patrolling the sea-coast, were gentlemen possessed of large estates and princely fortunes; and one who stood among them was pointed out to me as captain of a company, for whose use his liberality provided unbounded daily libations of champagne, and the best luxuries which French ingenuity can safely imprison in those well-known caskets with which Crimean warriors were not unacquainted at the close of the campaign.

They were eager for news, which was shouted out to them by their friends in the steamer, and one was struck by the intimate personal cordiality and familiar acquaintance which existed among them. Three heavy guns, mounted in an earthwork defended by palisades, covered the beach and the landing-place, and the garrison was to have been reinforced by a regiment from Charleston, which, however, had not got in readiness to go up on our steamer, owing to some little difficulties between the volunteers, their officers, and the quartermaster-general's department.

As the "Nina" approaches the tumble-down wharf, two or three citizens advance from the shade of shaky sheds to welcome us, and a few country vehicles and light phaetons are drawn forth from the same shelter to receive the passengers, while the negro boys and girls who have been playing upon the bales of cotton and barrels of rice, which represent the trade of the place on the wharf, take up

commanding positions for the better observation of our proceedings. There is an air of quaint simplicity and old-fashioned quiet about Georgetown, refreshingly antagonistic to the bustle and tumult of most American cities. While waiting for our vehicle we enjoyed the hospitality of one of our friends, who took us into an old-fashioned angular wooden mansion, more than a century old, still sound in every timber, and testifying in its quaint wainscotings, and the rigid framework of door and window, to the durability of its cypress timbers and the preservative character of the atmosphere. In early days it was the crack house of the old settlement, and the residence of the founder of the female branch of the family of our host, who now only makes it his halting-place when passing to and fro between Charleston and his plantation, leaving it the year round in charge of an old servant and her grandchild. Rose-trees and flowering shrubs clustered before the porch and filled the garden in front, and the establishment gave me a good idea of a London merchant's retreat about Chelsea a hundred and fifty years ago.

At length we were ready for our journey, and, mounted in two light covered vehicles, proceeded along the sandy track, which, after a while, led us to a deep cut in the bosom of the woods, where silence was only broken by the cry of a woodpecker, the boom of a crane, or the sharp challenge of the jay. For miles we passed through the shadow of this forest, meeting only two or three vehicles, containing female planterdom on little excursions of pleasure or business, who smiled their welcome as we passed. Arrived at a deep chocolate-colored stream, called Black River, full of fish and alligators, we find a flat large enough to accommodate vehicles and passengers, and propelled by two negroes pulling upon a stretched rope, in the manner usual in the ferry-boats of Switzerland, ready for our reception.

Another drive through a more open country, and we reach a fine grove of pine and live-oak, which melts away into a shrubbery, guarded by a rustic gate-way, passing through which, we are brought by a sudden turn into the planter's house, buried in trees, which dispute with the greensward and with wild flower-beds every yard of the space which lies between the hall-door and the waters of the Pedee; and in a few minutes, as we gaze over the expanse of fields just tinged with green by the first life of the early rice crops, marked by the deep water cuts, and bounded by a fringe of unceasing forest, the chimneys of the steamer we had left at Georgetown gliding as it were through the fields indicate the existence of another navigable river still beyond.

Leaving with regret the veranda which commanded so charming a foreground, we enter the house, and are reminded by its low-browed, old-fashioned rooms, of the country houses yet to be found in parts of Ireland or on the Scottish border, with additions, made by the luxury and love of foreign travel, of more than one generation of educated Southern planters. Paintings from Italy illustrate the walls, in juxtaposition with interesting portraits of early colonial governors and their lovely womankind, limned with no uncertain hand, and full of the vigor of touch and naturalness of drapery of which Copley has left us too few exemplars; and one portrait of Benjamin West claims for itself such honor as his own pencil can give. An excellent library—filled with collections of French and English classics, and with those ponderous editions of Voltaire, Rousseau, the *mémoires pour servir*, books of travel and history such as delighted our forefathers in the last century, and many works of American and general history—affords ample occupation for a rainy day.

But, alas! these, and all things good which else the house

affords, can be enjoyed but for a brief season. Just as nature has expanded every charm, developed every grace, and clothed the scene with all the beauty of opened flower, of ripening grain, and of mature vegetation, on the wings of the wind the poisoned breath comes, borne to the home of the white man, and he must fly before it or perish. The books lie unopened on their shelves, the flower blooms and dies unheeded, and, pity 'tis true, the old Madeira garnered 'neath the roof settles down for a fresh lease of life, and sets about its solitary task of acquiring a finer flavor for the infrequent lips of its banished master and his welcome visitors. This is the story, at least, that we hear on all sides, and such is the tale repeated to us beneath the porch, when the moon enhances while softening the loveliness of the scene, and the rich melody of mocking-birds fills the grove.

Within these hospitable doors Horace might banquet better than he did with Nasidienus, and drink such wine as can only be found among the descendants of the ancestry who, improvident enough in all else, learnt the wisdom of bottling up choice old Bual and Sercial ere the demon of oidium had dried up their generous sources forever. To these must be added excellent bread, ingenious varieties of the *galette*, compounded now of rice and now of Indian meal, delicious butter and fruits, all good of their kind. And is there anything bitter rising up from the bottom of the social bowl? My black friends who attend on me are grave as Mussulman Khitmutgars. They are attired in liveries, and wear white cravats and Berlin gloves. At night when we retire, off they go to their outer darkness in the small settlement of negrohood, which is separated from our house by a wooden palisade. Their fidelity is undoubted. The house breathes an air of security. The doors and windows are unlocked. There is but one gun, a fowling-piece, on the premises. No planter here-

abouts has any dread of his slaves. But I have seen, within the short time I have been in this part of the world, several dreadful accounts of murder and violence, in which masters suffered at the hands of their slaves. There is something suspicious in the constant, never-ending statement that "we are not afraid of our slaves." The curfew and the night patrol in the streets, the prisons and watch-houses, and the police regulations, prove that strict supervision, at all events, is needed and necessary. My host is a kind man and a good master. If slaves are happy anywhere, they should be so with him.

These people are fed by their master. They have upward of half a pound per diem of fat pork, and corn in abundance. They rear poultry and sell their chickens and eggs to the house. They are clothed by their master. He keeps them in sickness as in health. Now and then there are gifts of tobacco and molasses for the deserving. There was little labor going on in the fields, for the rice has been just exerting itself to get its head above water. These fields yield plentifully; for the waters of the river are fat, and they are let in whenever the planter requires it, by means of floodgates and small canals, through which the flats can carry their loads of grain to the river for loading the steamers.

[Following our traveller in his peregrinations through the South, we next take him up on a sugar plantation on the Mississippi. The part of his journey in which we now find him is to be taken by boat.]

Charon pushed his skiff into the water—there was a good deal of rain in it—in shape of snuffer-dish, some ten feet long and a foot deep. I got in, and the conscious waters immediately began vigorously spurting through the cotton wadding wherewith the craft was calked. Had we got out into the stream we should have had a swim for it,

and they do say the Mississippi is the most dangerous river for that healthful exercise in the known world.

"Why! deuce take you" (I said at least that, in my wrath), "don't you see the boat is leaky?"

"See it now for true, massa. Nobody able to tell dat till massa get in, tho'."

Another skiff proved to be staneh. I bade good-by to my friend, and sat down in my boat, which was soon forced along up-stream close to the bank, in order to get a good start across to the other side. The view, from my lonely position, was curious, but not at all picturesque. The landscape had disappeared at once. The world was bounded on both sides by a high bank, and was constituted by a broad river,—just as if one were sailing down an open sewer of enormous length and breadth. Above the bank rose, however, the tops of tall trees and the chimneys of sugar-houses. A row of a quarter of an hour brought us to the levee on the other side. I ascended the bank, and directly in front of me, across the road, appeared a carriage gateway and wickets of wood, painted white, in a line of park palings of the same material, which extended up and down the road far as the eye could follow, and guarded wide-spread fields of maize and sugar-cane. An avenue of trees, with branches close set, drooping and overarching a walk paved with red brick, led to the house, the porch of which was just visible at the extremity of the lawn, with clustering flowers, rose, jasmine, and creepers clinging to the pillars supporting the veranda.

The proprietor, who had espied my approach, issued forth with a section of sable attendants in his rear, and gave me a hearty welcome. The house was larger and better than the residences even of the richest planters, though it was in need of some little repair, and had been built perhaps fifty years ago, in the old Irish fashion, who

built well, ate well, drank well, and, finally, paid very well. The view from the belvedere was one of the most striking of its kind in the world. If an English agriculturist could see six thousand acres of the finest land in one field, unbroken by hedge or boundary, and covered with the most magnificent crops of tasselling Indian corn and sprouting sugar-cane, as level as a billiard-table, he would surely doubt his senses. But here is literally such a sight. Six thousand acres, better tilled than the finest patch in all the Lothians, green as Meath pastures, which can be cultivated for a hundred years to come without requiring manure, of depth practically unlimited, and yielding an annual profit on what is sold off it of at least twenty pounds an acre at the old prices and usual yield of sugar. Rising up in the midst of the verdure are the white lines of the negro cottages and the plantation offices and sugar-houses, which look like large public edifices in the distance. And who is the lord of all this fair domain? The proprietor of Houmas and Orange grove is a man, a self-made one, who has attained his apogee on the bright side of half a century, after twenty-five years of successful business.

When my eyes "uncurtained the early morning," I might have imagined myself in the magic garden of Cherry and Fair Star, so incessant and multifarious were the carols of the birds, which were the only happy colored people I saw in my Southern tour, notwithstanding the assurances of the many ingenious and candid gentlemen who attempted to prove to me that the palm of terrestrial felicity must be awarded to their negroes. As I stepped through my window upon the veranda, a sharp chirp called my attention to a mocking-bird perched upon a rose-bush beneath, whom my presence seemed to annoy to such a degree that I retreated behind my curtain, whence I observed her flight to a nest, cunningly hid in a creeping rose trailed around

a neighboring column of the house, where she imparted a breakfast of spiders and grasshoppers to her gaping and clamorous offspring. While I was admiring the motherly grace of this melodious fly-catcher, a servant brought coffee, and announced that the horses were ready, and that I might have a three hours ride before breakfast.

If I regretted the absence of the English agriculturist when I beheld the six thousand acres of cane and sixteen hundred of maize unfolded from the belvedere the day previous, I longed for his presence still more when I saw those evidences of luxuriant fertility attained without the use of phosphates or guano. The rich Mississippi bottoms need no manure; a rotation of maize with cane affords them the necessary recuperative action. The cane of last year's plant is left in stubble, and renews its growth this spring under the title of *ratoons*. When the maize is in tassel, cow-peas are dropped between the rows, and when the lordly stalk, of which I measured many twelve or even fifteen feet in height, bearing three and sometimes four ears, is topped to admit the ripening sun, the pea-vine twines itself around the trunk with a profusion of leaf and tendril that supplies the planter with the most desirable fodder for his mules in "rolling-time," which is their season of trial. Besides this, the corn-blades are culled and cured. These are the best meals of the Southern race-horse, and constitute nutritious hay without dust. . . .

As we ride through the wagon-roads,—of which there are not less than thirty miles in this confederation of four plantations held together by the purse and the life of our host,—the unwavering exactitude of the rows of cane, which run without deviation at right angles with the river down to the cane-brake, two miles off, proves that the negro would be a formidable rival in a ploughing-match. The cane has been "laid by;" that is, it requires no more

labor, and will soon "lap," or close up, though the rows are seven feet apart. It feathers like a palm top: a stalk which was cut measured six feet, although from the ridges it was but waist-high. On dissecting it near the root we find five nascent joints not a quarter of an inch apart. In a few weeks more these will shoot up like a spy-glass pulled out to its focus. . . .

In the rear of this great plantation there are eighteen thousand additional acres of cane-brake which are being slowly reclaimed. . . . We extended our ride into this jungle, on the borders of which, in the unfinished clearing, I saw plantations of "negro corn," the sable cultivators of which seem to have disregarded the symmetry practised in the fields of their master, who allows them from Saturday noon until Monday's cockcrow for the care of their private interests. . . .

Corn, chicken, and eggs are, from time immemorial, the perquisites of the negro, who has the monopoly of the two last-named articles in all well-ordered Louisiana plantations. Indeed, the white man cannot compete with them in raising poultry, and our host was evidently delighted when one of his negroes, who had brought a dozen Muscovy ducks to the mansion, refused to sell them to him except for cash. "But, Louis, won't you trust me? Am I not good for three dollars?" "Good enough, massa; but dis nigger want de money to buy flour and coffee for him young family. Folks at Donaldsonville will trust massa,—won't trust nigger." The money was paid, and, as the negro left us, his master observed, with a sly, humorous twinkle, "That fellow sold forty dollars' worth of corn last year, and all of them feed their chickens with my corn, and sell their own."

AMONG FLORIDA ALLIGATORS.

S. C. CLARKE.

[To the several stories of hunting life which we have introduced into these pages we may add one description of the large game of the streams and lakes of Florida, the bone-clad alligator. With it is given a sketch of the Everglade region which may be of interest.]

HAVING organized an expedition to the great Lake Okechobee, some thirty miles due west from the Indian River Inlet, we hired a wagon and pair of mules to carry our tents and necessary baggage, but, no other animals being attainable, only those of us who were fit for a tramp of nearly a hundred miles could go. Colonel Vincent, Macleod and Herbert of the "Victoria," Captain Morris, Roberts, and myself, with the two pilots, Pecetti and Weldon, as guides, and Tom and a negro whom we picked up at Capron for cooks,—ten men in all, well-armed,—we were strong enough to insure respect from any roving party of Seminoles who might have been tempted to rob a weaker party. There are at this time, it is supposed, two or three hundred of these Indians in the region between Lake Okechobee and the Keys, descendants of a few Seminoles who concealed themselves in these inaccessible fastnesses when the greater part of their nation was sent West in 1842. They plant some corn on the islands of the Everglades, but live principally by the chase. Hitherto they have not been hostile to the whites, but as they increase in numbers faster than the white settlers, it is not impossible that they may reoccupy Southern Florida sooner or later, it being, in fact, a region suited only to the roving hunter. . . .

The first day we made about twenty miles through a

forest of yellow pine, such as stretches along the Southern coast from Virginia to Alabama, the trees standing thirty or forty feet apart, with little underbrush. Here and there we came upon a hummock of good soil, covered with the live-oak, magnolia, and cabbage-palm, all interlaced with vines and creepers, so as to form an almost impassable jungle. Now the road would lead into a wide savanna or meadow, waving with grass and browsed by herds of wild cattle and deer. In these meadows were set bright, mirror-like lakes, the abodes of water-fowl and wading birds, black bass, and the grim alligator, which in these solitudes, not being impressed with the fear of man, will hardly trouble himself to move out of the way. March in this region corresponding to May in the Middle States, the birds were in full spring song in every thicket,—the cardinal, the non-pareil, the mocking-bird, and our old familiar robin, whose cheerful note greets the traveller all over North America. Up and down the great pine trunks ran the red and gray squirrels, the little brown hare scudded through the palmetto scrub, and the turkey-buzzards floated above our heads in long easy circles.

So we fared on our way till about four P.M., when we made our camp on a clear branch or creek which issued from a lake near by, and while some of the party went to look for a deer, Captain Herbert and I took our rods and went up the creek towards the lake. Casting our spoons into a deep hole, we soon took a mess of bass and pike, which were very abundant and eager to be caught, when, as we were preparing to return to camp, we suddenly saw an alligator about eight feet long quietly stealing towards us. I seized a young pine-tree about as thick as my arm, and made for him. Not at all alarmed, the beast opened his jaws and advanced, hissing loudly. I brought down my club with full force upon his head, but it seemed to produce

no impression; he still advanced as I retreated battering his skull.

"What is that brute's head made of?" inquired Herbert, as he came to my assistance with another club; and between us we managed to stun the hard-lived reptile, and left him on the ground.

The hunters brought in a young buck and two turkeys, so that we had a plentiful supper after our tramp. . . .

About two o'clock that night we were disturbed by the mules, which had been staked out to graze hard by, and which retreated towards the camp to the end of their ropes, snorting with terror. The dogs rushed to the scene of disturbance, and appeared to have a fight with some animal which escaped in the woods. Our guides thought it was a panther, and at daylight they started, with Morris and myself and all the dogs, to hunt for it. The hounds soon hit the trail, which we followed into a cypress swamp about half a mile from the camp, in the midst of which they started a large panther, which, being hotly pressed by the hounds, treed in a big live-oak on the farther side of the swamp. When we came up we plainly saw the beast lying out on a branch which stretched horizontally from the trunk about twenty-five feet from the ground.

"Now," said Pecetti, "you two fire first, and if you don't kill, Weldon and I will be ready. Aim at the heart."

Morris and I fired, and the panther sprang from the tree among the dogs, which all piled on him at once. There was a confused mass of fur rolling on the ground, snarling, and snapping, for half a minute; then the panther broke loose, and was making off, when Weldon put half a dozen buckshot in his head, and he rolled over and over, so nearly dead that when the dogs mounted him again he could do no mischief. He had badly cut both the deer-hounds, however, which had been the first to seize him: Weldon's fox-

ON THE COAST OF FLORIDA

From a Steel Plate

hounds, having more experience with this sort of game, had kept clear of his claws. It was a fine male, measuring eight feet from the nose to the tip of the tail, and we took the skin for a trophy. The tenacity of life in these large cats is very great. One of our balls had penetrated the chest, and the other had broken the fore leg, but he was still able to shake off the dogs, and would probably have escaped but for Weldon's shot. . . .

The next morning, March 13, we breakfasted upon a couple of gophers or land-tortoises which the men had found the day before in the pine-woods. These creatures are about eighteen inches long, and weigh twelve or fifteen pounds. A stew of the gopher and the terminal buds of the cabbage-palm is a favorite Florida dish. About noon we came suddenly upon the shore of the great lake Okechobee, which extends away to the west and south as far as the eye can reach: in fact, the shores are so low as to be invisible at any distance. This is by far the largest sheet of water in the State, being about forty miles long and thirty wide, but it is not deep. It contains on the western side several islands, which are occupied by the Seminoles. To the south and east of this lake are the Everglades, or Grassy Lakes, a region where land and water are mingled,—rivers, lakes, dry islands, and wet marshes all jumbled together in confusion, and extending over many hundred square miles, the chosen abode of the alligator, the gar-fish, the snapping-turtle, the moccasin snake, and other hideous and ferocious creatures more or less mythical, and recalling those earlier periods in the earth's history when the great monsters, the Ichthyosauri and the Plesiosauri, wallowed and crawled over the continents.

We made our camp in a grove near the lake, almost on the spot where Taylor fought his battle in 1838. As soon

as this was done the pilots went in search of a tree to make canoes. They found not far off a large cypress which served, and by the next night they had completed two canoes, each about twelve feet long and eighteen inches wide, suitable for navigating the lake and able to carry four men each. In the mean time we had commenced hostilities against the alligators, which were here very large, bold, and numerous. They lay basking in the sun upon the beach in front of our camp, some of them fifteen feet long, and it became necessary to drive them away, lest they should devour our dogs, or even our mules, for some of these monsters looked able to do it. We opened fire upon them with repeating rifles, and if any Indians were within hearing they must have supposed that General Taylor had come back again, such was the rapidity of our fusillade. The brain of the alligator is small, and developed chiefly in the region of destructiveness; but after a dozen were killed and many more wounded, it seemed to dawn upon their perceptions that this part of the lake was unsafe, and they gradually took themselves away. I disapprove of killing animals for mere sport, and destroy not deliberately except when I wish to use them for food; but the alligator is the enemy of all living creatures, the tyrant of the waters, and the death of one saves the lives of hundreds of other animals. So blaze away at the 'gators, O ye Florida tourists!—you will not kill many of them, anyway: their shells are too thick,—but spare the pelicans, who are a harmless race of fisherfolk, like ourselves.

There were great numbers of large turtles in the lake, *Chelonura* and *Trionyx*, from two to three feet long; garfish also, almost as big as the alligators. These mailed warriors, like the knights of old, exercise their prowess chiefly upon the defenceless multitudes of the fresh waters,

but I have heard of half a large alligator being found in the stomach of a shark at a river mouth. In spite of all these destroyers, the lake swarmed with fish. Pecetti could generally get enough black bass, pike, or perch at one or two casts of his net to feed our whole party if at any time it happened that they would not bite at the hook.

A curious feature of the lake and river scenery is the floating island. This is principally formed of the water-lettuce, or *Pistia*, an aquatic plant with long roots which descend to the bottom. These beds of *Pistia* become matted together with grass and weeds, so as to be thick enough to bear the weight of small animals, and even sometimes of man. In strong winds these islands break loose from their anchorage and float away for miles, till they bring up in some quiet bay, where the plants again take root. Lake Okechobee contains many of these floating meadows, which are a great resort for ducks and water-fowl. In fact, one would think that all the ducks, divers, herons, curlews, ibises, cranes, and waders generally had assembled here in mass-meeting. Among them are those rare and beautiful species, the scarlet ibis, roseate spoon-bill, and black-necked stilt. The ducks, being birds of passage, spending their summers up North, are acquainted with men and their arts, and are comparatively shy, but the native birds are very tame and can easily be approached.

I was awakened the next morning at sunrise by sounds from the woods as of a gang of ship-carpenters or calkers at work. It was the great ivory-billed woodpecker (*Picus principalis*) tearing off the bark and probing the dead trees for insects and grubs, and making a noise which could plainly be heard half a mile in the still morning air. Another sound of a different character now made itself

heard from the swamps. It was something like the bellowing of bulls, and proceeded from the old male alligators calling to their mates. This indicates the coming of spring, the breeding-season of these creatures. William Bartram, who travelled in East Florida a hundred years ago, gives a thrilling account of the terrible combats which he witnessed in the St. John's River between these rival champions, who did not hesitate to attack him in his boat.

The next day, March 15, being in want of meat, Colonel Vincent, Dr. Macleod, Morris, and I started for a hunt, taking Pecetti for guide, since nothing is easier than to get lost in this wilderness. We kept up the lake-shore to the north on the sandy beach, towards the mouth of the Kissimmee River, which here enters the lake. This is a deep and rapid stream, which drains the great wet prairies to the north, and in the rainy season must carry a large volume of water. Like the lake, it has great patches of water-lettuce, which in some places almost bridge the channel. Much of its course is through swamps, though in some places the pine barrens and live-oak hummocks approach its banks. It contains immense quantities of fish, —pike, bass, and perch.

In the first hummock which we reached the colonel shot a buck, and I got two young turkeys from a flock. As we emerged from this hummock the guide spied a herd of wild cattle feeding on the prairie about half a mile off, and by his direction we crept through the scrub as far as it afforded cover, and then trusted to the high grass for concealment till we got within a hundred yards of the herd, which consisted of about twenty cows and calves, with a couple of bulls. The doctor and colonel fired together and brought down a heifer. A big bull immediately charged towards the smoke and report of the guns, for he could not see us. On he came, head down and tail erect, bellow-

ing with rage,—a magnificent animal of brindled color, with an immensely heavy neck and shoulder, like a bison, but without the mane. When within fifty yards I fired at his head: the ball struck him full in the forehead and staggered him, but he shook his head and kept straight for us. I gave him another shot, which struck him in the chest and turned him, when Pecetti gave him sixteen buck-shot in the shoulder from his big double-barrel, which brought him down, dying bravely in defence of his family.

"His carcass is too old and tough to be of any good," said the guide, "but I'll take off his hide: the heifer will give us meat enough."

While he was butchering, Morris returned to the camp and sent out Tom with the wagon to bring in the beef and venison. It was not long before a flock of turkey-buzzards appeared in sight and floated in circles above our heads, waiting for our departure to begin their feast. It was formerly the opinion of naturalists that these birds were guided by scent in the discovery of the dead animals upon which they feed, but later investigations show that they are led by their acute vision; and my own experience convinces me that this is the fact. As we were returning to camp through the hummock, Pecetti killed a large rattle-snake: it was over five feet long, and as thick as the calf of a man's leg. . . .

On the morning of March 20, Captain Herbert, Pecetti and I went on a fishing excursion up the lake in a canoe. A few casts of the net near the shore procured a supply of small fish of the mullet species for bait, and we paddled up near to the inlet of the Kissimmee. Here we found the alligators and gars too numerous, they having collected probably to prey upon the fish which there enter the lake. In a quiet bay near the fringe of *Pistia* and water-lilies, where the water was five or six feet deep, we trolled with a spoon

for black bass, and took some of very large size,—eight, ten and twelve pounds. . . .

What adds much to the interest of fishing in strange waters is the uncertainty of the sport and the variety of species; and in this lake we could not tell whether the next offer would be from a peaceful perch, a bounding bass, a piratical pike, or a gigantic gar. I put a chub, or a fish resembling it, eight or nine inches long upon a gang of large hooks, and cast it astern with a hand-line. Presently I saw a great roll towards it from out the weeds, and my line stopped short. I had something very heavy, which, however, played in the sluggish fashion of the pike family, and in ten minutes, without much resistance, I had it alongside the canoe, and it was gaffed by Pecetti. It was a huge pike, four feet four inches long, and weighed, when we got to camp, thirty-four pounds. Pecetti called it the striped pike, and said he had seen them six feet long in some of the lakes: perhaps *Esox vittatus* (Rafinesque) of the Mississippi Basin.

By this time the gars had collected about us in such numbers that the other fish were driven away: we found it impossible to get a hook into their bony jaws or bills, and only succeeded in capturing one of small size by slipping a noose over its head as it followed the bait. This gar-fish is useless as food, but we wanted a few specimens for Dr. White, it being in demand for museums, particularly in foreign countries, as it belongs to a species exclusively American, and represents an order of fishes (the ganoids) of which few families at present exist. This one, *Lepidosteus*, has a wide range in America, being found from Florida to Wisconsin. Another American ganoid is *Amia calva*, the dog-fish or bow-fin, which is very numerous in Western rivers. Both are voracious, but unfit for food. They are described by Agassiz as being of an old-fashioned

type, such as were common in the earlier geologic periods, and this is one among many proofs that North America is the oldest of the continents.

Morris, Vincent, and the other hunters brought in to-day a large supply of game,—deer, turkeys, and ducks,—but sustained the loss of one of Morris's deer-hounds, which they supposed to have been taken by an alligator while swimming a lake in pursuit of a deer. They were some miles south of the camp when this occurred. They did not see the alligator, but the dog suddenly disappeared, and was not to be found after a long search. Morris felt so much disgusted by the loss of this valuable dog that he wished to return to the yacht and go down towards the Keys. So we started the next morning, and arrived at the inlet on the 23d. The weather had been delightful, as is usually the case in Florida in winter, but the day we arrived at the inlet we encountered the beginning of the equinoctial storm, which lasted two days and was very violent.

IN THE MAMMOTH CAVE.

THÉRÈSE YELVERTON.

[Among the many marvels of nature in the United States the Mammoth Cave holds a prominent position, and we feel it incumbent on us to accompany some of our company of travellers into its depths. The "Teresina in America" of Thérèse Yelverton (Viscountess Avonmore) affords us the opportunity, of which we avail ourselves in the following selection.]

We arrived at the Mammoth Cave on one of those heavenly days which earthly words fail to depict. It was the second week in November, the "Indian summer,"

the most charming season in America. If anything were necessary to convince me that a future beatitude is no fiction, it would be this foretaste of bliss in such days as these, when the whole being—mind and body—seems lapped in a state of peace and beatitude combined. Anxieties and worldly cares seem to float away into the dim distance; our love is free from feverish excitement, and hate has lost its gall and sting. The golden light which floats around mellows our soul to repose. There is that exhilarating, yet balmy nourishment in the atmosphere which lifts the weary spirit from its damp and earthly coil, and makes it glad, and light, and gleesome. The heavy "heart bowed down by weight of woe" suddenly imbibes some of the joyous elasticity which fills the insect tribe,—the bees and grasshoppers, the golden fly, glittering and humming in pure ecstasies, and the merry little beetles revelling in one continuous contra-dance. Rarely, indeed, can we overcharged human beings feel as blithesome as the insect world; we seek to taste the apples of delight which turn to ashes in our mouth, and neglect to sip with them the nectar in the breeze. What can we do? these breezes come so seldom. The insect sparkles to-day in the sunshine and to-morrow it dies. We of the superior race have to live and labor through sunshine and shade, and can only catch these rosy minutes as they fly.

Some of these halcyon moments we enjoyed on that fortunate day we arrived at the Mammoth Cave, Kentucky. The earth was covered with its autumn carpet of dry dark leaves,—brown and glossy on one side, deep violet on the other,—and crinkling and crushing beneath our tread, they kept up a staccato treble to the dulcet sighing of the wind through the yellow leaves still lingering on the trees. A delicious concert of sweet sounds, and one that Mozart and Mendelssohn must have studied well and care-

fully. The atmosphere was bright and clear as under a summer sun, but without the heat; the air as fine and bracing as winter, but without the cold. We lost sight entirely of the two great tormentors, heat and cold, and for the few days of our stay forgot their very existence.

I have heard of persons feeling, under the effect of laughter, as light and buoyant as if floating in ambient air. The atmosphere during their "Indian summer" must, doubtless, be strongly impregnated with oxygen, for we experienced a similar sensation; which was probably deepened by the fact of our having come from Louisville, where those hotel stairs had seemed a perfect toil to us.

The country around the caves, for eight or ten miles, was a series of deep ravines, studded with projecting cliffs and rocks, and covered with oak—principally the English oak—and another gigantic species, with leaves from a quarter to half a yard long, but of the same form as the ordinary oak-leaf. Up and down the ravines we scrambled and roamed, as happy as goats or wild chamois. These ravines, or glens, have no doubt been the beds of some ancient river, now, perhaps, flowing through the bowels of the earth; for this part of the country is intersected by underground rivers, a stream often suddenly appearing, which, after flowing on for a few miles, plunges rapidly into the earth and is lost to sight.

An anecdote is told of two millers who had their mills on two different rivers, thirty miles apart. There had been a long drought, and neither mill had been working; but one day miller No. 1 heard his wheel going round at a tremendous pace, and going to examine it perceived a quantity of water, although there had not been a drop of rain for some time. He went over to communicate his good luck to his neighbor.

"Oh!" exclaimed miller No. 2, "you're gettin' my water

unbeknownst, for a cloud burst over us the other night and nearly drowned us all."

It was evident the millers were working the same stream, which ran for thirty miles underground, similar to the lakes in Florida, called sinks (for Americans call everything by gross-sounding names), which suddenly disappear, leaving all the fish stranded. Sometimes the water returns, sometimes not. . . .

Independent of the caves, the scenery around, to a lover of nature, is well worthy of a visit, and for a summer resort is unsurpassed; shady, romantic walks through the woods; a delicious air breathed from the gigantic mouth of the cavern, whence, in the hot months, it blows cool and refreshing; in the cold ones soft and warm; the actual temperature of the cave never varying. The sensations of heat and cold are produced by comparison with the outer air.

It occurred to a medical man some years ago that the *uniform atmosphere* of this cave might be a specific for consumption.

Possessed with this theory, the doctor had a dozen small houses constructed in the cavern, about a mile or two from its mouth, and to these he conveyed his patients. From the appearance of these places of abode, the only wonder is that the poor invalids did not expire after twenty-four hours of residence in them. They, however, contrived to exist there about three months, most of them being carried out *in extremis*. The houses consisted of a single room, built of the rough stone of the cavern,—which, in this part, bears all the appearance of a stone-quarry,—and without one particle of comfort beyond a boarded floor, the small dwelling being constructed entirely on the model of a lock-up, or "stone-jug." The cells of a modern prison are quite palatial in comparison with them. The darkness is

such as might be felt; and it is impossible to realize what darkness actually is until experienced in some place where a ray of sunlight has never penetrated.

From the mouth of the cavern to that part where the doctor's houses were built was a continual, though gradual, descent, and at that spot there was a solid roof of a hundred and fifty feet of earth. The houses—or rather detached stone boxes—were so small that without vitiating the air only one person could remain in them at one time; so that, besides the darkness,—in case of any accident to their lamps,—these poor creatures must have endured utter solitude. Their food was brought from the hotel, two or three miles away, on the hill, and consequently must have been cold and comfortless. They were kept prisoners within their narrow cells, for the rough rocks and stones everywhere abounding rendered a promenade for invalids quite impracticable. The deprivation of sunlight, fresh air, and all the beauties of the earth must have been the direst punishment imaginable. No wonder these poor creatures were carried out one by one to die.

The last one having become so weak that it was deemed unsafe to move him, his friends resolved to stay with him in the cavern till the last. What transpired is now beyond investigation. Whether some effect of light, which in this cavern has a most mysterious and awful appearance, or whether the death-bed was one of terrors, owing to some imp of mischief having laid a plan to "scare" them, as they say in this country, is not known; but they rushed terror-stricken from the cave, and on reaching the hotel fell down insensible. Subsequently they declared they had seen spirits carrying away their friend. Mustering a strong force, the people from *terra firma*, with the guides and plenty of torches, sallied down to the lower and supposed infernal regions. The spirits, however, had fled,

leaving nothing but the stiffening corpse of the poor consumptive. This ended all hope of the cavern as a cure for consumption.

The Mammoth Cave is perhaps the most extensively explored cavern known. It extends for nine continuous miles, so that it would be possible to walk fifty miles in and out by different roads. The cavern consists of various large chambers and lofty domes, averaging from twenty to one hundred feet in height. Some of the chambers exactly resemble the tombs of the kings of Egypt, and the narrow tortuous defiles through the rocks are also very like the roads into the Pyramids. Most of these chambers are merely natural excavations in the solid rock. One of the white-domed ceilings is covered with a thick scroll-pattern traced in black, and consists entirely of bats, which take up their winter quarters in these caverns, and fare better in them apparently than the consumptives. It is curious how these sightless creatures, from various parts of the country, find out the caves, so impervious to light and cold, and where, from the noise they make, they seem to have a merry time of it. Not so, however, the visitors passing through this part of the cave; for the bats are apt to fly right in one's face, or stick against one's clothes, and bite furiously at any attempt to dislodge them.

Still farther on there is a vast vault, upward of eighty feet high, formed of gypsum with some sort of crystals embedded in it. When you sit and gaze on it for some time, by the dim light of the lamps, the vault seems to recede into azure space. A bright sparkling veil hangs over it like the milky way, seen dimly between the shelving rocks, which bulge out in round soft layers, of a whitish-gray cast, and look exactly like petrified clouds. By a judicious movement of the light of the lamps a most beautiful phenomenon of cloud-scenery is effected, and by

their gradual extinction a Stygian darkness seems to wrap all in perfect horror. This, the "Star Chamber," is one of the finest effects in the Mammoth Cave, and it might be enhanced to the wildest magnificence by an artistic arrangement of variously colored lights. The cave would be a fine place in which to read Dante's Inferno.

Here and there through the cave there are immense pits or chasms, only some few yards in circumference, but from two to three hundred feet in depth. A piece of paper saturated in oil is thrown down and displays the fearful gulf, the bottom of which appears to have the same formation of rock and clay as the top. Sometimes we ascended ten or twenty feet by ladders and occasionally descended. We traversed about a mile of passage where the ceiling, six feet high, was as smooth and white as plaster could have made it. It was literally covered with the names of former visitors. In some places there were hundreds of cards on the floor, left by guests,—so it is not only English people who have a mania for inscribing their names. Indeed, as to that, it is common to most nations, for I had a secretary named Van Kenkle, who wrote his name upon every article belonging to me.

For eight or nine miles we continued to traverse passages and chambers, sometimes over rough pieces of rock, sometimes through the thick dust of ages, sometimes through the tortuous gorges,—mere slits between the rocks through which we had to creep,—sometimes coming upon a well or spring of sweet water. At about three or four miles from the mouth we came to the chamber called "The Church," from its resemblance to the ancient cathedral vault, frequently to be seen on the European continent under churches or monasteries, and called the crypt.

This church of the Mammoth Cave is a singular phenomenon. The roof, which is not lofty, is supported by a

number of pillars, in many places forming Gothic arches, and running at somewhat regular distances, dividing the church into aisles. These columns are actually enormous stalactites, and the fresco of petrified water upon them has all the appearance of the most rich and elaborate carving. In some places the pillars of stone have not quite reached the ground, and remain suspended from the roof. Other and smaller condensed stalactites resembled the drooping rosettes which unite the spring of Gothic arches. In one portion of the church is an enormous stone, carved out exactly like the bishop's chair, or throne, usually seen on the high altar. The altar itself is very like those primitive stone edifices sculptured by the early Christians, when driven to celebrate their worship in the catacombs of Rome.

This chamber is a marvellous freak of nature imitating art, for the hand of man has never touched it or worked it into shape; yet if any one were transported here unconsciously, he would, on looking round, imagine himself in the chancel crypt of some old cathedral of the ninth or tenth century. Some romantic lovers, evidently influenced by this idea, had actually, a few weeks before our visit, arrived at the cave, accompanied by their friends and the clergyman, and caused the marriage ceremony to be performed in that very church. It was a whimsical idea, and must have been a cold, comfortless, clammy affair; but the feelings and sentiment about weddings totally differ in America from our European notions on the subject,—rarely is it a joyous merry-making, rather the reverse, as I have mentioned in a former chapter.

A few miles farther on, we came to the great natural marvel, the subterranean river, with its buried water and eyeless fish, its beautiful parterres of stone flowers and shrubs, like a garden covered with morning hoar-frost.

On this dismal river we were launched in a little skiff, not the most seaworthy in the world,—and I must confess to having experienced a feeling of dread of being upset on that mysterious stream, whose outlet might be, for all we knew, in a region we did not care to visit, or even to contemplate the possibility of visiting. The echo had a thrill of awe that made one's flesh creep and hair stand on end. If one called spirits there from the vasty deep, and they did not come, yet they certainly answered from the dark shadows of the rocks falling around the lurid glare of the torches,—the only light on the river of Erebus. It was quite easy to believe there were myriads of spirits flitting around, and stretching out their weird arms to carry us down to bottomless Hades.

There is another very interesting cave, which is not so frequently visited by travellers, who when they have seen *the big thing*, are only anxious to rush away again. It is not so extensive as the Mammoth, but infinitely more beautiful and more inaccessible, the descent having to be accomplished by ladders; but once down, it is a fairy-land, a continuous scene of rapturous enchantment. The stalactites simulate the most exquisite parterre of flowers, the most magnificent forest of crystallized trees, the most wondrous marble carving, even to that perfection of art which shrouds the figure in transparent drapery, like "the statue of the Dead Christ" at Naples; nor was Apollo's charm unknown there. Our guide tapped upon these magic crystals, and produced the sweetest harmony ear ever heard, or at least it sounded so.

The walls of the chambers and passages were encrusted with the stalactite flowers. They could be broken off their stems, and as so few visitors ventured down, the guide allowed me to take one. One chamber was absolutely curtained with this marvellous formation of petrified water,

and when the guide held the light behind the scene, it produced the effect of being draped in the purest amber. These drooping curtains, some fifty feet in height, emitted the most musical tones when struck. If the physician had brought his patients to these fairy bowers, he might, I think, have succeeded in sending them home quite cured, but I believe the cave had not been discovered then.

With a brilliant light the spot was perfectly lovely, and the atmosphere was that of constant, unchanged temperature, which puts the human lungs in a state of beatitude. I should not in the least object to live in that paradise of crystal flowers and adamantine forms, the most beautiful that the imagination of man has ever conceived to be curtained in living amber, and pillowed—well, I must admit that—in dust; but it was such *clean* dust. . . . The texture of these stalactites, when examined by daylight, resembles alabaster, thus the leaves, flowers, sprigs, are perfectly beautiful. Nor are these caves without their incidents of life's drama. The grave and the gay have been enacted here as elsewhere. The episode of the physician and his patients was sad enough, but a more terrible tragedy resulted from a wager.

The guides are particular on entering the caves with a large party to beg them to keep together, as it would be impossible for a person to find his own way out of the labyrinth of passages, chambers, etc. Two gentlemen of a party made a bet that they would accomplish the feat, and, taking their opportunity, slipped away from their party, without the guides being aware of their absence, and it was not until late in the evening that the other party to the wager remarked that those two foolhardy fellows had not found their way out of the cavern. This coming to the ears of the guide, he exclaimed, "Then they are dead men!" Nevertheless they went in full force to

do everything that was possible to find them, but spent the night in vain searches. Sometimes they came upon their track in the soft dust, then lost it again.

On the following day the search was renewed by the guide who had escorted the party, and his description of the finding of one of the gentlemen was truly horrible: "It was the most tarnation cutting up job I ever had in my life," said the guide. "We are not much of cowards, we guides,—we get accustomed to awfulness down in the bowels of the earth; but when that *critter's* shrieks first came to my ear, I just shivered all over and my feet rooted to the ground,—not that I did not wish to save him, the poor devil, but I got an idea that that shriek came right straight from hell and no mistake, and I had no fancy to go there before I was sent for! Wall, when I had wiped my brow and taken a drink, I went on in the direction of the sound, for it came every now and again, the echoes making like fifty devils instead of one. I found him sooner than I expected; he was a sight to behold; he flew at me like a tiger; he clutched me, and pulled me, and wrestled with me, yelling and howling like a wild beast. I thought he would have torn me to pieces. I should not have known him again for the same gentleman. His eyes glared, his mouth was foaming, and his hair on end, his clothes all torn and covered with dust. He was a real raving maniac, and so he remained, as far as I know. The work I had to get him out of that cave! He would stand stock still and shake all over, then suddenly clutch at me again. I was the stronger man of the two, and he was weak from long fasting, or I never should have got him out. The doctor said he was fright-stricken."

And this was the case, as they thought, with the other poor fellow, who was not found for weeks, it having been conjectured that he had fallen down a hole. One of the

guides making some new exploration, discovered him sitting down, no sign of decomposition having taken place, and no sign of his having died of starvation, for a piece of biscuit was found in his pocket. He was supposed to have died of terror, the terrible darkness working upon the nervous system, and the hopelessness of penetrating it making the minutes appear hours. A guide who had once been lost there himself for some twenty hours, said he never could believe he had not been there for several days.

DOWN THE OHIO AND MISSISSIPPI.

THOMAS L. NICHOLS.

["Forty Years of American Life," by Dr. Thomas L. Nichols, is the source of the following selection, which gives a graphic and interesting picture of steamboat life on the great rivers of the West in the days before the war. It needs only one thing to complete the story, the race and the explosion, which was no uncommon incident at that period, but an example of which, fortunately for our author, was not among his experiences.]

We embarked on a little steamboat which drew twelve inches of water, and whose single wide paddle-wheel was at the stern, and extended the whole width of the hull. A succession of dams made the river navigable at that season of low water, and at each dam we were let down by a lock to a lower level. At the high stage of water dams and locks are all buried deep beneath the surface, and larger steamboats go careering over them.

What I best remember, in crossing the Alleghanies and descending this river, were the beds of coal. It seemed to be everywhere just below the surface. We saw it along the

route, where the people dug the fuel for their fires out of a hole in the yard, ten feet from the door. Along the high perpendicular banks of the river there were strata of coal ten or twelve feet thick. Men were digging it down with picks and sliding it into flat-boats, which, when the river rose, would float down with the current to Cincinnati, Louisville, Memphis, and New Orleans. These frail boats —long boxes made of deal boards nailed together, and loaded nearly to the top—would many of them be lost. The swell of a passing steamboat, or a snag or a sawyer in the river, would sink them. They would ground on sand-bars. A sudden hurricane sometimes sinks a hundred of them. Perhaps a third of the whole number are lost, but the coal costs almost nothing—three halfpence a bushel —and brings a price proportional to the distance which it floats in safety.

At Pittsburg, a city of coal and iron, smoky and grimy as Newcastle or Birmingham, we took a larger boat, but still a small one, for Cincinnati. The Ohio was very low. We passed slowly down, getting pleasant glimpses of the towns upon its banks, and especially of the flourishing cities of Cincinnati and Louisville.

I was disappointed with the Ohio for a few hundred miles from its source, most unreasonable tourist that I was. I recall whatever I may have said to its disparagement. The Ohio, charming in all its course of a thousand miles, becomes grandly beautiful below Louisville for the lower half of its course. Were it but deep as well as broad and splendid in its great reaches and graceful curves and picturesque banks, nothing would be wanting to its pleasing souvenirs. But I have tried its current at an unfortunate period,—the river at its lowest point. At its highest it would be fifty feet deeper,—a great torrent pouring onward towards the sea.

We were all of us in high spirits on the "Fort Wayne." The crew was firing up, and singing merrily below; and in the cabin we were sitting round our good coal-fire, chatting, reading, and some playing poker, calculating the next morning but one to wake upon the Mississippi. So passed we down merrily, until, sunk upon a bar, we saw the wreck of the steamboat "Plymouth," which two nights before had been run into by another boat, which sunk her instantly, and her deck-passengers woke up under the waters of the Ohio. Twenty unfortunates were drowned; and our passengers, accustomed to the river, spoke of it with perfect indifference, as a very common affair.

We passed this bar safely, touching bottom indeed, as we often did; but in passing over the next we grounded firm and fast. The engines were worked at their greatest power, but in vain. Efforts were made all day to get the boat off, but without moving her, and older voyagers began to tell pleasant stories of boats lying for three weeks on a sand-bar, and getting out of provisions and wood. For us passengers there was but patience, but for captain and crew there was a hard night's work in a cold November rain. They went at it heartily, and when we woke up in the morning the steamboat was afloat, and as soon as she had got in a fresh supply of wood we went merrily down the Ohio again, putting off by a day our arrival at the Father of Waters. So we went, talking on morals and politics, reading the "Wandering Jew," and playing poker, until dinner came; and just after dinner we came to another bar, on which we ran as before, giving our crew a second night of hardship and toil, and us a more thorough disgust of low-water navigation. We got off by morning as before, by great exertion and the steady use of effective machinery, the boat being hoisted over the bar inch by inch by the aid of great spars, blocks, and windlass.

There was still, but a short distance below this spot, the worst bar of all to pass. . . . Having been twice aground and lost nearly two days, our captain determined to take every precaution. He hired a flat-boat, into which were discharged many tons of whiskey and butter, and which was lashed alongside. A boat was sent down to sound the channel and lay buoys. This done, just as breakfast was ready, all the male passengers were summoned to go on board the flat-boat, fastened alongside, with the butter and whiskey, so as to lighten the steamer as much as possible, and when we were all aboard we started down. As luck would have it, the current carried the boat a few feet out of her proper course, and she stuck fast again. The wheels could not move her, and we jumped on board again to eat our breakfast, now grown cold from waiting.

This despatched, we went out on the promenade deck, and to our chagrin saw the "Louis Philippe," which left Louisville one day behind us, coming down, looking light and lofty, with a flat-boat alongside. She came down rapidly, and passed close by us, her passengers laughing in triumph at our predicament. The "Louis Philippe" had not got her length below us before she too stuck fast and swung round into a more difficult position, lying broadside upon the bar, with the strong current full against her. The laugh was now on our side, and the "Louis Philippe" gave rise to the more jokes, because her hurricane-deck was entirely covered with cabbages, with their stumps sticking up, giving her a droll appearance, while our hurricane-deck was filled with chicken-coops. It was time now to go to work in earnest. More freight was discharged into our lighter, and all the passengers, except the women and children, were sent on board her. We thickly covered the barrels of whiskey and kegs of butter, and the captain, to keep us off the steamer, cast us loose, and we

floated off with the current, and were safely blown ashore on the Kentucky side, about a mile below, leaving the two steamers above to get off as soon as they were able.

When our flat-boat touched the Kentucky bank of the river, her ninety passengers jumped joyfully ashore, and with noisy hilarity scattered along the beach. The morning was beautiful. The clear sunlight glittered upon the river and lighted up the forest with golden radiance. The sky was blue, and the air cool and bracing. The land was high, well wooded, and fertile. Seeing a substantial-looking double log house a short distance from the river, about a dozen of us went up to warm our fingers at its fire. . . .

In a few moments our lucky boat swung round and came down for us, leaving the less fortunate "Louis Philippe" to get off as she could, and her passengers to learn not to halloo before they got out of the wood. And now—now, by the first light of the morning for this grand, this terrible Mississippi!

It was a misty moonlight night when we came to the confluence of the Ohio with the Mississippi. We had come down a tedious, and in some degree a perilous, course of one thousand miles; we had still a thousand miles to go before arriving at New Orleans, which is the next stage of our Southern journey.

The Mississippi and the Ohio come together at an acute angle, and their waters flow down in unmingled currents, differing in color, for a long distance. Even at night we could distinguish the line which divides them. The Ohio water is filled with fine sand and loam; the Mississippi is discolored with clay besides, and the water looks like a tub of soapsuds after a hard day's washing.

Whoever looks upon the map with a utilitarian eye sees at the confluence of these great rivers a favorable point

for a great city. A few years since an English company took possession of or purchased this site, and, with a capital of nearly a million of pounds sterling, commenced operations. They lithographed plans of the city and views of the public buildings. There were domes, spires, and cupolas, hotels, warehouses, and lines of steamboats along both rivers. How fair, how magnificent it all looked on the India paper! You should see the result as I saw it in the misty miasma, by the pale moonlight. Cairo is a swamp, overflowed by every rise of either river. The large hotel, one of the two buildings erected, is slowly sinking beneath the surface. Piles will not stand up, and, however deep they are driven, sink still deeper. The present business of the place, consisting of selling supplies to steamboats, and transferring passengers from the down- to the up-river boats, is done on floating store-boats, made fast to the shore. Cairo has since been built into a considerable town by dyking out the rivers, and was an important naval and military point during the Civil War. . . .

This is my thirteenth day of steamboating,—the usual time across the Atlantic,—and I have four days more at least. You may well suppose that a hundred passengers are put to their trumps for amusement. The "Wandering Jew" did very well as long as it lasted. Some keep on reading novels, having laid in a stock or exchanged with other passengers, but cards are the resource of the majority. The centre-tables, as soon as breakfast is over, are occupied with parties playing poker or loo, and are covered with bank-notes and silver. Many who do not play look on to see the frolics of fortune. Several of these players are professional gamesters, and quite cool, as men who hope to win by chance or skill ought to be. Others, in their flushing cheeks and trembling hands and voices, show how the passion is fastening upon them. These are

driven by weariness and tempted by the smallness of the game to commence playing. The passion increases day by day, and so do the stakes, until, before reaching New Orleans, the verdant ones have lost all their money, and with it their self-respect and their confidence in the future. Depressed by shame, disheartened at being in a strange city without money, they are in a miserable condition, and ready to throw themselves away. They become dependent upon the blacklegs who have led them on, are instructed in their evil courses, made their tools and catspaws, and perhaps induced to enter upon courses of crime of a more dangerous character. All this comes of playing cards to kill time on the Mississippi.

While those who need the excitement of betting play at games of bluff and poker, some amuse themselves with whist, and old-fashioned fellows get into a corner and have a bout at old sledge; and now at eleven o'clock the great cabin of our boat presents a curious appearance. Playing around the tables, with noisy, joyous laughter, are half a dozen merry little boys and girls. These have all got well acquainted with each other, and seem to enjoy themselves thoroughly.

I can give you little idea of this portion of the Mississippi. The river is very low, and does not seem large enough to be the outlet of the thousand streams above; for the waters on which we float come not only from the melting snows of the Rocky Mountains, but there are mingled with them the bright springs of Western New York, a large part of Pennsylvania, part of Maryland, Virginia, North Carolina, and a large portion of the Western States. Yet, with all the waters of this vast area, our boat can sometimes scarcely keep the channel. Last night, running at her full speed, she went crashing into a snag, with a concussion and scraping which woke us all up, and

made the timid ones spring out of their berths. Our safety was in our going down-stream instead of up,—the difference of rubbing the back of a hedgehog the right and the wrong way. These snags are great trees which cave off and are washed down the current; the roots become embedded in the bottom; and the stem and branches, pointing down-stream, and half or wholly covered with water, form a terrible *steamboat de frise*, which tears an ascending steamboat to pieces, but generally allows those going with the current to pass over or through them with safety.

The river is full of islands, so that you often see but a small portion of its waters; it winds along in so many convolutions that you must steam a hundred miles often to make twenty in a straight line. Many of these bends may be avoided at high water by taking the cross cuts, called "running a *chute*," when the whole country for twenty miles on each side is submerged.

Usually, on one side or the other, there is a perpendicular bank of clay and loam some thirty feet high, and here and there are small plantations. The river gradually wears them off, carrying down whole acres in a season. From this bank the land descends back to the swamps which skirt nearly the whole length of the river. These in very low water are comparatively dry, but as the river rises they fill up, and the whole country is like a great lake, filled with a dense growth of timber. These curving banks, the rude and solitary huts of the wood-cutters, the vast bars of sand, covered gradually with canebrake, and the range of impenetrable forest for hundreds of miles, comprise a vast gloomy landscape, which must be seen to be realized. . . .

While the scene is fresh in my memory let me describe to you my last morning upon the Mississippi. But why do

I speak thus of a scene which can never fade from my remembrance, but in all future years will glow the brightest picture which nature and civilization have daguerreotyped upon my heart?

I rose before the sun, while all the east was glowing with his refracted light. The steamboat had made excellent progress all night, not being obliged to stop by fog, and was only detained a short time by running plump into the mud on the river's bank; but she soon backed out of that scrape.

We had here, fifty miles above New Orleans, an almost tropical sunrise. The Mississippi, as if tired of its irregularities, flowed on an even current between its low banks, along which on each side are raised embankments of earth from four to ten feet in height,—the levee, which extends for hundreds of miles along the river, defending the plantations from being overflowed at high water.

As I gained the hurricane-deck the scene was enchanting, and, alas! I fear indescribable. On each side, as far as the eye could reach, were scattered the beautiful houses of the planters, flanked on each side by the huts of their negroes, with trees, shrubbery, and gardens. For miles away, up and down the river, extended the bright green fields of sugar-cane, looking more like great fields of Indian corn than any crop to which a Northern eye is familiar, but surpassing that in vividness of the tints and density of growth, the cane growing ten feet high, and the leaves at the top covering the whole surface. Back of these immense fields of bright green were seen the darker shades of the cypress swamp, and, to give the most picturesque effect to the landscape, on every side, in the midst of each great plantation, rose the tall white towers of the sugar-mills, throwing up graceful columns of smoke and clouds of steam. The sugar-making process was in full operation.

After the wild desolation of the Mississippi, for more than half its course below the Ohio, you will not wonder that I gazed upon this scene of wealth and beauty in a sort of ecstasy. Oh! how unlike our November in the far, bleak north was this scene of life in Louisiana! The earth seemed a paradise of fertility and loveliness. The sun rose and lighted up with a brighter radiance a landscape of which I had not imagined half its beauty.

The steamer stopped to wood, and I sprang on shore. Well, the air was as soft and delicious as our last days in June,—the gardens were filled with flowers; yes, bushels of roses were blooming for those who chose to pluck them; while oranges were turning their green to gold, and figs were ripening in the sun. It was a Creole plantation,—French the only language heard. A procession of carts, each drawn by a pair of mules, and driven by a fat and happy negro, who seemed to joke with every motion and laugh all over from head to foot, came from the sugar-house to get wood, of which an immense quantity was lying upon the banks of the river, saved from the vast mass of forest trees washed down at every freshet.

I cannot describe the appropriateness of everything on these plantations. These Creole planters look as if nature had formed them for good masters; in any other sphere they are out of their element,—here most decidedly at home. The negroes, male and female, seem made on purpose for their masters, and the mules were certainly made on purpose for the negroes. Any imaginable change would destroy this harmonious relation. Do they not all enjoy alike this paradise,—this scene of plenty and enchantment? The negroes work and are all the better for such beneficial exercise, as they would be all the worse without it. They have their feasts, their holidays,—more liberty than thousands of New York mechanics enjoy in their lifetimes, and

a freedom from care and anxiety which a poor white man never knows. I begin to think that Paradise is on the banks of the Mississippi, and that the nearest approach to the realization of the schemes of Fourier is on our Southern plantations.

FROM NEW ORLEANS TO RED RIVER.

FREDERICK LAW OLMSTED.

[We have given a descriptive sketch of steamboat travel down the Ohio and Mississippi in the first half of the century, in what we may almost call the days of the barbarians. It is here followed by a sketch of steamboating, from New Orleans to and up the Red River, in the ante-war period, in which will be found methods as unprogressive and people as uncivilized as in any period of modern travel. The getting off was a marvel of procrastination, worthy of the most primitive days of American travel.]

On a certain Saturday morning, when I had determined on the trip, I found that two boats, the "Swamp Fox" and the "St. Charles," were advertised to leave the same evening for the Red River. I went to the levee, and finding the "St. Charles" to be the better of the two, I asked her clerk if I could engage a state-room. There was just one state-room berth left unengaged; I was requested to place my name against its number on the passenger book; and did so, understanding that it was thus secured for me.

Having taken leave of my friends, I had my luggage brought down, and went on board at half-past three,—the boat being advertised to sail at four. Four o'clock passed, and freight was still being taken on,—a fire had been made in the furnace, and the boat's big bell was rung. I noticed that the "Swamp Fox" was also firing up, and that her bell

rang whenever ours did,—though she was not advertised to sail till five. At length, when five o'clock came, the clerk told me he thought, perhaps, they would not be able to get off at all that night,—there was so much freight still to come on board. Six o'clock arrived, and he felt certain that, if they did get off that night, it would not be till very late. At half-past six he said the captain had not come on board yet, and he was quite sure they would not be able to get off that night. I prepared to return to the hotel, and asked if they would leave in the morning. He thought not. He was confident they would not. He was positive they could not leave now before Monday,—Monday noon. Monday at twelve o'clock,—I might rely upon it.

Monday morning the *Picayune* stated, editorially, that the floating palace, the "St. Charles," would leave for Shreveport at five o'clock, and if anybody wanted to make a quick and luxurious trip up Red River with a jolly good soul, Captain Lickup was in command. It also stated, in another paragraph, that if any of its friends had any business up Red River, Captain Pitchup was a whole-souled veteran in that trade, and was going up with that remarkably low-draught favorite, the "Swamp Fox," to leave at four o'clock that evening. Both boats were also announced, in the advertising columns, to leave at four o'clock.

As the clerk had said noon, however, I thought there might have been a misprint in the newspaper announcements, and so went on board the "St. Charles" again before twelve. The clerk informed me that the newspaper was right,—they had finally concluded not to sail until four o'clock. Before four I returned again, and the boat again fired up, and rung her bell. So did the "Swamp Fox." Neither, however, was quite ready to leave at four o'clock. Not quite ready at five. Even at six—not yet quite ready.

At seven, the fires having burned out in the furnace, and the stevedores having gone away, leaving a quantity of freight yet on the dock, without advising this time with the clerk, I had my baggage re-transferred to the hotel.

A similar performance was repeated on Tuesday.

On Wednesday I found the berth I had engaged occupied by a very strong man, who was not very polite when I informed him that I believed there was some mistake,—that the berth he was using had been engaged to me. I went to the clerk, who said that he was sorry, but that, as I had not stayed on board that night, and had not paid for the berth, he had not been sure that I should go, and he had, therefore, given it to the gentleman who now had it in possession, and whom, he thought, it would not be best to try to reason out of it. He was very busy, he observed, because the boat was going to start at four o'clock; if I would now pay him the price of passage, he would do the best he could for me. When he had time to examine, he would probably put me in some other state-room, perhaps quite as good a one as that I had lost. Meanwhile, he kindly offered me the temporary use of his private state-room. I inquired if it was quite certain that the boat would get off at four; for I had been asked to dine with a friend at three o'clock. There was not the smallest doubt of it,—at four they would leave. They were all ready at that moment, and only waited till four because the agent had advertised that they would,—merely a technical point of honor.

But, by some error of calculation, I suppose, she didn't go at four. Nor at five. Nor at six.

At seven o'clock the "Swamp Fox" and the "St. Charles" were both discharging dense smoke from their chimneys, blowing steam, and ringing bells. It was obvious that

each was making every exertion to get off before the other. The captains of both boats stood at the break of the hurricane-deck, apparently waiting in great impatience for the mails to come on board.

The "St. Charles" was crowded with passengers, and her decks were piled high with freight. Bumboatmen, about the bows, were offering shells, and oranges, and bananas; and newsboys, and peddlers, and tract distributors were squeezing about with their wares among the passengers. I had confidence in their instinct; there had been no such numbers of them the previous evenings, and I made up my mind, although past seven o'clock, that the "St. Charles" would not let her fires go down again.

Among the peddlers there were two of cheap "literature," and among their yellow covers each had two or three copies of the cheap edition (pamphlet) of "Uncle Tom's Cabin." They did not cry it out as they did the other books they had, but held it forth among others, so that its title could be seen. One of them told me he carried it because gentlemen often inquired for it, and he sold a good many; at least three copies were sold to passengers on the boat. . . .

It was twenty minutes after seven when the captain observed,—scanning the levee in every direction to see if there was another cart or carriage coming towards us,—"No use waiting any longer, I reckon: throw off, Mr. Heady." (The "Swamp Fox" did not leave, I afterwards heard, till the following Saturday.)

We backed out, winded round head up, and as we began to breast the current, a dozen of the negro boat-hands, standing on the freight piled up on the low forecastle, began to sing, waving hats and handkerchiefs, and shirts lashed to poles, towards the people who stood on the sterns of the steamboats at the levee.

After losing a few lines, I copied literally into my note-book:

"Ye see dem boat way dah ahead.
Chorus.—Oahoiohieu.
De San Charles is arter 'em, dey mus' go behine.
Oahoiohieu.
So stir up dah, my livelies, stir her up.
Oahoiohieu.
Dey's burnin' not'n but fat and rosum.
Oahoiohieu.
Oh, we is gwine up de Red River, oh!
Oahoiohieu.
Oh, we mus' part from you dah asho'.
Oahoiohieu.
Gib my lub to Dinah, oh!
Oahoiohieu." . . .

The wit introduced into these songs has, I suspect, been rather over-estimated.

As soon as the song was ended, I went into the cabin to remind the clerk to obtain a berth for me. I found two brilliant supper-tables reaching the whole length of the long cabin, and a file of men standing on each side of both of them, ready to take seats as soon as the signal was given.

The clerk was in his room, with two other men, and appeared to be more occupied than ever. His manner was, I thought, now rather cool, not to say rude; and he very distinctly informed me that every berth was occupied, and he didn't know where I was to sleep. He judged I was able to take care of myself; and if I was not, he was quite sure he had too much to do to give all his time to my surveillance. I then went to the commander, and told him that I thought myself entitled to a berth. I had paid for one, and should not have taken passage in the boat if it had not been promised me. I was not disposed to fight for it, particularly as the gentleman occupying the berth engaged to me was a deal bigger fellow than I, and also

carried a bigger knife, but I thought the clerk was accountable to me for a berth, and I begged that he would inform him so. He replied that the clerk probably knew his business; he had nothing to do with it; and walked away from me. I then addressed myself to a second clerk, or sub-officer of some denomination, who more good-naturedly informed me that half the company were in the same condition as myself, and I needn't be alarmed, cots would be provided for us.

As I saw that the supper-table was likely to be crowded, I asked if there would be a second table. "Yes, they'll keep on eating till they all get through." I walked the deck till I saw those who had been first seated at the table coming out; then, going in, I found the table still crowded, while many stood waiting to take seats as fast as any were vacated. I obtained one for myself at length, and had no sooner occupied it than two half-intoxicated and garrulous men took the adjoining stools.

It was near nine o'clock before the tables were cleared away, and immediately afterwards the waiters began to rig a framework for sleeping-cots in their place. These cots were simply canvas shelves, five feet and a half long, two wide, and less than two feet apart, perpendicularly. A waiter, whose good will I had purchased at the supper-table, gave me a hint to secure one of them for myself, as soon as they were erected, by putting my hat in it. I did so, and saw that others did the same. I chose a cot as near as possible to the midship door of the cabin, perceiving that there was not likely to be the best possible air, after all the passengers were laid up for the night in this compact manner.

Nearly as fast as the cots were ready they were occupied. To make sure that mine was not stolen from me, I also, without much undressing, laid myself away. A single

blanket was the only bedclothing provided. I had not lain long before I was driven, by an exceedingly offensive smell, to search for a cleaner neighborhood; but I found all the cots, fore and aft, were either occupied or engaged. I immediately returned, and that I might have a *dernier ressort*, left my shawl in that I had first obtained.

In the forward part of the cabin there was a bar, a stove, a table, and a placard of rules, forbidding smoking, gambling, or swearing in the cabin, and a close company of drinkers, smokers, card-players, and constant swearers. I went out, and stepped down to the boiler-deck. The boat had been provided with very poor wood, and the firemen were crowding it into the furnaces whenever they could find room for it, driving smaller sticks between the larger ones at the top by a battering-ram method.

Most of the firemen were Irish born; one with whom I conversed was English. He said they were divided into three watches, each working four hours at a time, and all hands liable to be called, when wooding, or landing, or taking on freight, to assist the deck-hands. They were paid now but thirty dollars a month—ordinarily forty, and sometimes sixty—and board. He was a sailor bred. This boat-life was harder than seafaring, but the pay was better, and the trips were short. The regular thing was to make two trips, and then lay up for a spree. It would be too hard on a man, he thought, to pursue it regularly; two trips "on end" was as much as a man could stand. He must then take a "refreshment." Working this way for three weeks, and then refreshing for about one, he did not think it was unhealthy, no more than ordinary seafaring. He concluded by informing me that the most striking peculiarity of the business was that it kept a man, notwithstanding wholesale periodical refreshment, very dry. He was of opinion that after the information I had ob-

tained, if I gave him at least the price of a single drink and some tobacco, it would be characteristic of a gentleman.

Going round behind the furnace, I found a large quantity of freight: hogsheads, barrels, cases, bales, boxes, nail-rods, rolls of leather, ploughs, cotton, bale-rope, and fire-wood, all thrown together in the most confused manner, with hot steam-pipes and parts of the engine crossing through it. As I explored farther aft, I found negroes lying asleep in all postures upon the freight. A single group only, of five or six, appeared to be awake, and as I drew near they commenced to sing a Methodist hymn, not loudly, as negroes generally do, but, as it seemed to me, with a good deal of tenderness and feeling; a few white people—men, women, and children—were lying here and there among the negroes. Altogether, I learned we had two hundred of these deck passengers, black and white. A stove, by which they could fry bacon, was the only furniture provided for them by the boat. They carried with them their provisions for the voyage, and had their choice of the freight for beds.

As I came to the bows again, and was about to ascend to the cabin, two men came down, one of whom I recognized to have been my cot neighbor. "Where's a bucket?" said he. "By thunder, this fellow was so strong I could not sleep by him, so I stumped him to come down and wash his feet." "I am much obliged to you," said I; and I was, very much; the man had been lying in the cot beneath mine, to which I now returned, and soon fell asleep.

I awoke about midnight. There was an unusual jar in the boat, and an evident excitement among people whom I could hear talking on deck. I rolled out of my cot and stepped out on the gallery. The steamboat "Kimball"

was running head-and-head with us, and so close that one might have jumped easily from our paddle-box on to her guards. A few other passengers had turned out besides myself, and most of the waiters were leaning on the rail of the gallery.

Occasionally a few words of banter passed between them and the waiters of the "Kimball;" below, the firemen were shouting as they crowded the furnaces, and some one could be heard cheering them: "Shove her up, boys! Shove her up! Give her hell!" "She's got to hold a conversation with us before she gets by, anyhow," said one of the negroes. "Ye har that ar' whistlin'?" said a white man; "tell ye thar ain't any too much water in her bilers when ye har that." I laughed silently, but was not without a slight expectant sensation, which Burke would perhaps have called sublime. At length the "Kimball" drew slowly ahead, crossed our bow, and the contest was given up. "De ole lady too heavy," said a waiter; "if I could pitch a few ton of dat ar freight off her bow, I bet de 'Kimball' would be askin' her to show de way mighty quick."

[Our traveller missed the experience which in former days made travel now and then very lively upon the Mississippi,—a blow up of one or other of the racing boats. A bell was rung to rouse the cot-sleepers at half-past four, and the rest of the day was taken up in preparations for and eating the three meals.]

Every part of the boat, except the black hurricane-deck, was crowded; and so large a number of equally uncomfortable and disagreeable men I think I never saw elsewhere together. We made very slow progress, landing, it seems to me, after we entered Red River, at every "bend," "bottom," "bayou," "point," and "plantation" that came in sight; often for no other object than to roll out a barrel of flour or a keg of nails; sometimes merely to furnish news-

papers to a wealthy planter, who had much cotton to send to market, and whom it was therefore desirable to please.

I was sitting one day on the forward gallery, watching a pair of ducks, that were alternately floating on the river and flying farther ahead as the steamer approached them. A man standing near me drew a long-barrelled and very finely-finished pistol from his coat-pocket, and, resting it against a stanchion, took aim at them. They were, I judged, fully the boat's own length—not less than two hundred feet—from us, and were just raising their wings to fly when he fired. One of them only rose; the other flapped round and round, and when within ten yards of the boat dived. The bullet had broken its wing. So remarkable a shot excited, of course, not a little admiration and conversation. Half a dozen other men standing near me at once drew pistols or revolvers from under their clothing, and several were firing at floating chips or objects on the shore. I saw no more remarkable shooting, however; and that the duck should have been hit at such a distance was generally considered a piece of luck. A man who had been in the "Rangers" said that all his company could put a ball into a tree, the size of a man's body, at sixty paces, at every shot, with Colt's army revolver, not taking steady aim, but firing at the jerk of the arm.

This pistol episode was almost the only entertainment in which the passengers engaged themselves, except eating, drinking, smoking, conversation, and card-playing. Gambling was constantly going on, day and night. I don't think there was an interruption to it of fifteen minutes in three days. The conversation was almost exclusively confined to the topics of steamboats, liquors, cards, black-land, red-land, bottom-land, timber-land, warrants, and locations, sugar, cotton, corn, and negroes.

After the first night I preferred to sleep on the trunks

in the social hall [the lobby which contained the passengers' baggage] rather than among the cots in the crowded cabin, and several others did the same. There were, in fact, not cots enough for all the passengers excluded from the state-rooms. I found that some, and I presume most, of the passengers, by making the clerk believe that they would otherwise take the "Swamp Fox," had obtained their passage at considerably less price than I had paid.

[The above are the principal events of this description of steamboat life before the war. Our passenger's journey ended at Natchitoches, on the Red River, whence he started on a vagrant trip through Texas, in which we need not follow him.]

WINTER ON THE PRAIRIES.

G. W. FEATHERSTONHAUGH.

[Of the earlier records of English travel in America one of the most interesting and informing works is Featherstonhaugh's "A Canoe Voyage up the Minnay Sotor," a journey made by the author in 1835, and yielding much useful information on what is now the ancient history of the great West. The selection given is devoted to some of his prairie experiences during his journey through the Sioux country from Lac qui Parle to Lake Travers.]

RENVILLE had procured me a *charette*, or cart, to carry the tent, baggage, and provisions. I was to ride an old gray mare, with a foal running alongside; one of the Canadians was to drive the *charette*, and Miler and the rest were to walk. The morning was exceeding cold, and our road was along the prairie parallel with the lake. All the country in every direction, having been burnt over, was perfectly black, and a disagreeable sooty odor filled the

atmosphere. At the end of five hours of a very tedious march we reached a stream called *Wahboptah,* which may be translated *Ground-nut* river, the savages being in the habit of digging up the *Psoralea esculenta,* a nutritive bulbous root which grows here. The stream was about thirty feet wide, and had some trees growing on its banks. Having built up a good fire, the men proceeded to cook their dinner, while I strolled up the stream and collected some very fine unios, although I found it bitterly cold wading in the shallow water to procure them.

Having fed our horses on the grass near the stream which had not been burnt over, we started again for *Les Grosses Isles,* which we were instructed were distant about seven leagues, at the foot of Big Stone Lake. During the first two leagues the strong sooty smell of the country gave me a severe headache, and the weather became so cold that I was very uncomfortable; the fire, however, had not extended beyond this distance, for in about an hour and a half from our departure we came to the grass again, and I fortunately got rid of my headache. Our cavalry was exceedingly pleased by the change, the horses repeatedly winnowing to each other, as if to express their satisfaction. I here perceived a live gopher, or geomys, feebly running in the grass, and, dismounting, caught it. It apparently had strayed from its burrow, and had suffered from the weather. After examining it I let it go again, as it was impossible to take care of it, and I did not like to consign it to the men, as I knew they would kill and eat it, for they spared nothing.

As the evening advanced it became excessively cold, and a sharp wind, accompanied with frozen sleet, set in from the northeast: this soon became so thick that I could scarcely look up, much more see anything in the direction in which I was proceeding. Securing my person and ears

as well as I could with my blanket coat, I left it to the mare—who Renville told me had been more than once to Lake Travers—to take her own course. At length the sleet became so dense that I lost sight of everybody except the little foal, which, generally lagging behind in the wake of its dam, occasionally trotted up to her when in her great anxiety she called for it. I never saw greater marks of maternal feeling in an animal than in this poor creature to her young one.

As we advanced my situation became exceedingly painful: the frozen sleet came in streams upon my face and eyes when I looked up; my feet and hands were so cold that I had scarcely any power over them; my whole exterior, as well as the head and neck of the mare, was covered with a glazing of ice; night was advancing, and we were without a guide, upon a dreary and shelterless moor of very great extent, and far beyond our present day's journey, with no prospect of an abatement of the storm. In the course of a somewhat adventurous life I have occasionally had to meet with serious privations and to look danger rather steadily in the face, but I had never been where there was so slight a chance of any favorable change. I had not even the comfort before me that every bleak moor in England offers under similar circumstances to the imagination,—some kind of shelter to receive us at last, if we were not overpowered by the inclemency of the weather. It became absolutely necessary to consider what it was best to do, if overtaken before dark by a deep snow.

My first thought was not to separate myself from my party, which I had not seen for some time, for they had the cart, the tent, and the provisions; and if we failed in our attempt to reach the few trees that grew near Grosses Isles,—the only chance we had of finding materials to make

SUNRISE FROM THE SUMMIT OF PIKE'S PEAK

fire,—we could at any rate burn the *charette*, eat something, and cover ourselves as well as we could with the tent. This we inevitably should have to do if we missed the station we were aiming at, and of which there was imminent danger, as it was too thick for us to discern any trees at a distance. I therefore stopped the mare for a while and turned our backs to the storm, which seemed to be a great relief to us both. I had not heard the voices of the men for some time, but I knew the cart was slowly following me, and I thought it best to wait awhile ere I advanced towards them, as it was quite possible that I might deviate from the direction they were advancing in and separate myself from them altogether.

In about a quarter of an hour the voices of the men answered to the shouts I had from time to time made, and soon after they joined me, all of them covered with ice and icicles. The men were afraid we had got into the wrong track, having passed one or two that forked different ways, and this would have been a most serious misfortune. Upon appealing to Miler, who was covered with ice, his answer was, "N'ayez pas peur, monsieur; n'ayez pas peur." I was well aware that this opinion of a sagacious guide like himself, trained to all the difficulties and incidents of Indian life, was better than that of the others, and I had more confidence in his prudence and in his conduct than I had in them; but still I was not without fear that darkness would overtake us; and if it had been left to myself, should have been inclined to attempt to set up the tent while it was daylight.

But Miler kept walking on before the *charette*, acting up to his character of guide in the most thorough manner. I determined, therefore, to be governed altogether by him, and taking my place in the rear of the *charette*, thought that, as I had now joined my party, I would alight, and

endeavor, by running a little, to restore the circulation of my limbs; but my feet and hands were so benumbed that I found it even difficult to dismount, or to stand when I reached the ground. As to the poor mare, she had icicles depending from her nose six or eight inches long, which I broke off; and holding the bridle under my right arm, and averting my face a little from the storm, I tried to run and draw her into a gentle trot, but it was all in vain; she was too anxious about her foal, which was tired and becoming weak, and could scarce come up to her when she called it. Full of anxiety as I was about myself, I could not but admire the solicitude of this good mother for her young, so earnestly does the voice of nature plead even with the inferior animals; that voice which God has planted in ourselves, no less for the safety of the species we are bound to protect than to express the intensity of the love we bear to our offspring.

After trying in vain to get the mare out of her snail's pace without at all improving my own situation, I perceived that I must be making leeway, for I had lost sight of the *charette*, so I determined to mount again and push her into a trot; we had got up a quasi-trot in the morning, and I hoped I might succeed in doing it again, but it took me a long time to do it. I was so benumbed that I could not regain my seat in the saddle until I had made several efforts, and then the adjusting my blanket-coat, and the covering my face to protect it from the cutting sleet, lost me so much time, that I was in a worse situation than ever,—separated from my party, night approaching, and somewhat apprehensive that in the gray light that was beginning to prevail I might wander from them and be unable to rejoin them. Being already half frozen, and feeling rather faint at my stomach, it was clear to me that in that case I should certainly be frozen to death.

Getting on as well as I could, and ruminating very unsatisfactorily upon these possible consequences, the storm began to abate, and the wind veered to the northwest; the mare knew this, and gave immediate signs of it by improving her pace. As we went on the weather began to clear up, and as I was straining my eyes to look for the *charette*, I heard the horse which drew it neigh several times; to this the mare immediately answered, and soon after came a cheer from the men. Miler was soon seen advancing to meet me, with the joyful intelligence that the trees at Grosses Isles were in sight. He said the horse in the *charette* was the first to see them and to announce the discovery by neighing; so that, although horses have not yet reached the art, as some asses have done, of making long speeches, yet the epithet of dumb animals is not altogether appropriate to them.

All our anxieties were now at an end, and we soon terminated this distressing ride, and reached a spot near a marsh, where three or four trees were standing. Fortunately for us, there was some dead wood on the ground, and some wild grass for the horses, which we immediately proceeded to tether and turn loose, that they might choose their own bite, for the night was too cold for them to stray far. Whilst the men were collecting wood and pitching the tent, I endeavored to produce a light, but my fingers were so benumbed that, after breaking several matches, I gave up the attempt, and began to run backward and forward, and strike my hands together, to restore my natural warmth. The sickness at my stomach from exposure and inanition now increased upon me, and I felt persuaded that I should have perished if I had been obliged to lie out on the prairie without a fire. At length, the men having got a fire up, I gradually recovered from my indisposition, and having eaten part of a biscuit felt much better. I

was sorry, however, to receive bad accounts from the men about the water, which we so much wanted to make soup for themselves and for my tea. It appeared that the only water that was to be obtained was from a hole in the swamp, and that it was as black as ink. On inspecting it, it was so thick and disgusting that I thought it impossible to use it, but remembering the saying of an old French fellow-traveller, "Que tout est bon, quand il n'y a pas de choix," and knowing that nothing but a cup of tea would thoroughly revive me, and unwilling to send Miler a mile in the dark to Big Stone Lake to obtain clear water, I determined to make the best I could of it.

I had a large pot therefore filled, and boiled it, skimming it as the black scum came in immense quantities to the top, and having exhausted it of everything of that kind that it would yield, the very notable idea struck me to put a quantity of it into my kettle with some black tea and boil it over again, which I did, and really, when I poured it out it looked so like strong black tea, and was so good and refreshing, that I soon forgot everything about it except that it had restored me to life and animation. How many dead newts and other animals that had perished in the desiccation of the swamp that had attended the late drought went to form this tea-broth would not be easily calculated, but I forgave them and the sires that begot them.

Whilst we were at our meal, a half-perished Nahcotah Indian came to our fire, whom I saw at the dance of the braves the day before. I remembered him the moment he came up, from his having attracted my attention during the dance by firing his gun over the heads of the dancers, and then presenting it to one of the braves. Miler had informed me that it was not unusual upon such occasions for savages who look on to become so excited as to give every-

thing away that they have. This was what this poor devil had done; he had parted with his gun and all his little property, and was now going a journey of six or eight days to the Cheyenne River to kill buffalo, without any arms, and without anything to eat by the way. Some one had given him an old pistol without a lock to it, and seating himself by the fire without saying a word, he after a while pulled it out, and asked Miler if I would repair it, and give him some powder and ball? I told Miler to inform him that people could not make locks for pistols when they were travelling on the prairie in such stormy weather, but that I would give him something to eat, and directed the men to give him some of the pork and biscuit out of their pot, which he seemed to enjoy very much.

Feeling once more comfortable after a hearty supper, I entered my tent, and remained there to a late hour bringing up my notes, which I had few opportunities of doing at Lac qui Parle. Before I lay down I could not help contrasting the cheerless prospect before me at sunset and the suffering I experienced with the cheerful state of mind and body I had now returned to, and for which I trust I was most sincerely grateful to God, who had preserved me in continued health and safety. I felt completely wound up again, and ready to go on for any length of time, especially with the reasonable prospect of a good night's rest before me.

Such are the agreeable excitements attending this kind of life, to those who can enter without prejudice into the spirit of it. Certainly, whilst your progress is successful, it is delightful. You have plenty to eat, and you enjoy what you eat; you are amused and instructed; it is true it is often cold, but then it is not always so. You encamp when you please; you cut down as large a tree as you please, and you make as large a fire of it as you please,

without fearing an action of trespass. You kill deer out of any park you are passing through without being questioned, and you have the rare privilege of leaving your night's lodging without calling for the landlord's bill. All law and government proceed from yourself; and the great point upon which everything turns is the successful management of the party you are the head of. Prudence, consistency, firmness, and a little generosity now and then by way of condiment, will carry such a traveller through everything.

But there is a reverse to the picture. Days and nights exposed to cold, soaking rains; want of food and water; unavoidable exaggeration of danger; painful solicitude for those dear to and absent from you, and most anxious moments when you occasionally feel that prudence is scarcely sufficient to insure your safety. Even the intense and curious impatience to push on in the face of apparent danger makes you at times feel a remorse on account of those you are leading into it. Such are the contrasts of feeling by which the wanderer in these distant regions, still unvisited by a ray of civilization, is frequently agitated.

[Reaching Lake Travers, one of the sources of the Red River of the North, he found quarters with Mr. Brown, the resident factor of the American Fur Company.]

After breakfast Mr. Brown showed me some very rare furs he possessed,—several very fine grizzly bear-skins (*Ursus ferox*), one of which was a bright yellow, a rare variety. He had also an exceedingly large and rich otter-skin, which, with many other things, I purchased of him. But my most valuable acquisition here was made from an Assiniboin chief, who came in about an hour before I departed. This was a fine bow, made of bone and wood, with a cord

of very strong sinew. The chief had performed a feat with it for which Wanetáh, a Nahcotah chief, had been celebrated. He had killed two buffaloes that were galloping on a parallel with his own horse at one draft of his arrow, it having passed through the first and inflicted a mortal wound upon the second.

The chief was very unwilling to part with it. We tried him several times in vain, and at length I offered him five gold-pieces, or twenty-five dollars. "*Máházhee! Héeyah!*" "Yellow iron! No!" he replied. At last Mr. Brown produced some brilliant scarlet cloth. The sight of it overcame his reluctance; it would make such beautiful leggings, and his squaws would be so delighted with it! So I gave him three yards of the cloth, and he delivered me the bow, a quiver of arrows, and a skin case, which contained it. Mr. Brown, of course, got his share of the amount, though he acted very fairly with me. Money is unknown to these savages, and they place no value upon it. He would not have taken twenty of these gold-pieces for his bow, but thought he had made a good bargain with it for the cloth, although I have no doubt Mr. Brown would have sold it to any one for ten dollars. It was an affair of barter, where both parties were satisfied, which, under similar circumstances, is perhaps the best definition of value.

A HUNTER'S CHRISTMAS DINNER.

J. S. CAMPION.

[Campion's "On the Frontier: Reminiscences of Wild Sports, Personal Adventure, and Strange Scenes," a work full of vitality, is the source of our present selection. Some of the author's adventures with hostile Indians are very interesting, but the following account of how the author won his Christmas dinner is likely to prove more attractive reading.]

On the evening of December 23 word was brought into camp by one of the hands, who had been looking up the mules, that he had come across the tracks of some twenty-five turkeys, within five or six miles of camp. This was indeed great news. Hope dawned upon us. We should have the fat turkey for Christmas, at all events.

At daylight the next day we started for the spot where the turkey-tracks had been seen; the snow was melted off the low ground, but still lay thick on the cedar and piñon ridges, and in patches on the bottoms.

On arriving at the place we took the trail, and soon ran it to a ridge-top, covered with piñon-trees, on the nuts of which the turkeys had been feeding. Here the tracks spread in all directions, since the turkeys had wandered about, each on his own hook, searching for nuts, and, to double the chances of finding them, we also separated, one going up, the other down, the ridge,—going, too, very carefully, for wild turkeys are the most wary of all birds, and require to be hunted with, if possible, more caution than do deer. And we knew not the moment when we might come upon our game, as it was highly probable they were close at hand; for turkeys, if unmolested, daily frequent

the same range of feeding-ground, until it is exhausted of food. By and by I came to where eight of the straggling birds had come together and started off again in company. The drove had evidently separated into two or more lots, and I followed the eight turkeys for many miles and for many hours without seeing fresh sign, until at length I came to the edge of a precipitous cliff overlooking a wide part of the valley, the river flowing just below me, and a large grove of big cottonwood-trees in a bottom not far away.

Evidently I was at the place from which the turkeys had flown off the night before to go to roost. I quickly descended, and, going under the cottonwood-trees, searched in the tangle and jungle for sign of their having roosted above, and soon satisfied myself that they had done so. The next step necessary was to discover where the turkeys had alighted in the morning; but this might entail a long search, and, as it was already past noon, I sat down to rest, eat the luncheon I had provided myself with, and come to some conclusion as to which direction I had best choose to make my first cast in.

I had not proceeded far on my way again, when I came suddenly upon a "sign" that arrested my attention and raised hope in my breast,—the tracks of a big fat buck! He had crossed the river-bottom diagonally, and his trail plainly told me all about him: the great width of and the distance between his tracks proclaimed his sex and size, and their depth in the ground his weight. He had been going at an easy trot; the glaze on them was bright, their edges unbroken; not a speck of drifted dust was on them; they were as fresh as new paint. They were not an hour old.

In imagination I smelt roasted venison, and instantly started in pursuit. I followed on the tracks until within an hour of sunset, but never got even a glimpse of the

deer; and by that time his trail had brought me to the bank of a stream flowing down one of the side valleys. The buck browsing here and there, but never stopping long in one place, had led me a wide circuit through and over valley and ridges. He had not seen or smelled me, however, since none of his movements showed that he had been alarmed.

The stream, at the place where the deer's track led to it, was unusually wide, consequently slack in current, and therefore frozen over. The snow still lay on the ice, and the buck's track, where he had crossed, looked but just made. The ice seemed firm, and I started to cross the creek. About ten feet from shore, bang through I went, waist deep, into the cold water, and broke and scrambled my way back with great difficulty, and with noise enough to frighten into a gallop any wild animal that might be within a quarter of a mile of me.

It was very disagreeable, very annoying, and *very* cold; and my clothes beginning to freeze on me, I started for camp at a brisk walk.

Just as the sun was going down I passed near to where the turkeys had flown off to roost. It struck me that by watching there a short time I might see them return to the same or a neighboring roost, knowing they often do so. This, however, was very cold work, my clothes being in a half-dried, half-frozen condition; and I was just going to give it up, when I heard the faint distant report of a rifle. The sound redoubled my attention, since I supposed that game was stirring.

In a few minutes I heard the quick sharp alarm call of the turkey, the unmistakable pit-pit, and saw four of them sail off from the edge of the cliff, at about sixty yards' distance from me, into the top branches of the trees forming one of the groups in the valley below. Drawing gently back, and

keeping as much as possible under cover, I made my way down into the valley, and started in the direction of the grove of trees in which the turkeys had settled.

It was getting dark, and I had gone but a short way, when, at a distance of about two hundred yards in front, a most extraordinary-looking object presented itself to my view. It looked like a haycock on legs with the handle of a pitchfork sticking out of it; it was steadily advancing through the gloom to where I stood, and arrived quite close to me before I could quite make out what it was. It proved to be my companion, with two turkeys tied together by the legs and slung over his shoulder across his rifle. The wind coming up the valley and blowing the feathers out in all directions had given the turkeys in the gloaming the extraordinary appearance that had astonished me so much. I gave a low whistle, and he joined me; I pointed to the turkeys in the trees. He dropped those he already had, hung them up out of wolf reach, and together we cautiously crept under the four roosting turkeys.

The light was very bad for rifle-shooting, but our front sights were of ivory, and our birds were skyed; so drawing the best beads we could, we fired simultaneously, and with great success, two fine birds dropping dead at our feet, —the others making off.

We congratulated each other, and started for camp with four fat turkeys,—and fat indeed they were, for they had been feeding all autumn on walnuts, hickory-nuts, grapes, sweet acorns, and piñons, at—or rather I suspect without —discretion.

We had a long trudge home, the turkeys getting apparently heavier every mile. As we tramped along my companion related his day's experience. About noon he had come upon the fresh tracks of some turkeys feeding along one of the ridges, and had followed the birds until

within about three hours of sunset, when, on peeping into an open glade, he saw fourteen of them scattered over it, picking up seeds and strutting about. As the turkeys seemed to be approaching him, he lay quite still, watching them through the thicket which concealed him. Ultimately they got quite close, giving many fair opportunities to shoot one. But he was determined not to fire unless necessary, preferring to wait for an occasion to present itself enabling him to kill two at one shot,—a very rare chance to obtain. He said it was most interesting to lie there at his ease and watch the motions and movements of the birds as they fed about and spread themselves in fancied security. At last his opportunity came, and firing without a moment's delay, he floored his birds, taking the head of the nearest clean off, and shooting the farther one through the body at the butt of his wings. This was the shot I had heard. I then told him what I had seen, and what had befallen me, and we got home quite done up, but rejoicing at our good luck.

Supper was waiting, and this meal, a blazing fire, and the pipe of peace, recruited us after our fatigues.

We had been very careful and sparing in the use of our spirits, not knowing how long it might be before we should be able to get a fresh supply, or what necessity might arise for their use; but this was considered an occasion when the flowing bowl ought to be indulged in, so grogs all round were mixed and our success celebrated. When this interesting ceremony had been concluded, my companion remarked to me, "Our luck has evidently turned, and, as gamblers always do, we ought to press our good fortune while it lasts. We have got our Christmas turkeys; no doubt the buck you followed is destined to grace our Christmas dinner. I am the man to kill it. Daylight shall see me on his track. You will behold my face no

more until I return with the haunches of the big buck." Then he turned in and I quickly followed his example. At the time I had not the remotest idea that my comrade really intended to put his threat into execution; I thought he was "gassing," and put it down to the credit of the flowing bowl.

Next morning I awoke at my usual time,—daybreak,—got out of my blankets, arose, stirred the fire into a great blaze and turned my back to it to get a good warm. I looked for my companion,—his blankets were empty; I glanced towards the arms,—his rifle and belt were gone; I felt his blankets,—they were cold. He had consequently been gone for some time.

I made a cast round, and struck his fresh tracks going in the direction of our last day's tramp. He had "gone for" the big buck. For my part, I was too tired to stir that day. Though then as hard as nails, and in first-rate condition and training, I was thoroughly done up and quite stiff—"played out"—with the previous day's wetting and walking, so remained in camp, and spent the time in helping to make the plum-pudding, dress and stuff the turkeys, and in resting,—principally in resting.

Night came, but not my comrade. I was not exactly uneasy about him, for he was a first-rate hunter and mountaineer; but many are the unexpected accidents that may happen to a lone wanderer in the wilderness.

I piled the wood on the fire and sat waiting for him until near midnight. Then I began to think I was foolish to do so, and had better go to sleep. Just as I was turning in the dogs ran out, frisking and capering, into the darkness. I heard the whistle of my comrade, and he strode into the light of the camp-fire. On his back, in a sling extemporized out of the skin of the deer, were the hind-quarters of a big buck. It was not yet twelve, and though a close

shave on being Christmas-day, our bill of fare was filled. Some more flowing bowl.

At breakfast the following day my companion narrated to us the story of his late hunt, as nearly as may be, in the following words:

He said, "By daylight I was where you came to grief by breaking through the ice, with this difference, that I was upon the other side of the creek, having crossed it higher up by means of a beaver dam. Being a cold trail, I pushed ahead sharply, keeping a good lookout, and in a little over two hours came to where the buck had lain down to pass the dark of the night. There being no morning moon, I knew he had not stirred before sunrise, and might, therefore, be browsing, or standing under some tree quite near; so continued my way most cautiously, never following the tracks when they crossed an open, unless obliged to do so on account of the ground being frozen hard, so that it often took me a long time to get his trail again after leaving it; but I knew, if the buck once saw or got a sniff of me, he might run ten miles without stopping.

"About eleven o'clock I sighted him. I was peeping cautiously out of a thicket, at whose edge I had just arrived, into a large park-like glade, and saw him under a big white-oak-tree, eating the acorns. There was no cover between me and where the buck stood, so I could not risk trying to get nearer to him except by making a long detour, and the nearest edge of the timber I was in was too far off him to risk a shot from. There was, therefore, nothing for it but to sit down and wait until he pleased to move on or lie down, and so give me a chance to get nearer. Being hungry, I utilized the time by eating my luncheon, and then fell to smoking. Well, he kept me there over an hour, and then started off in a straight line in a trot. As he took a bee-line for the river, I knew what

he was after: he was going to take his 'little drink.' I, too, should have liked to indulge in a little drink, to wash down my luncheon.

"As soon as the buck was well under way I started at the double, on a parallel course, hoping to get a shot at him in the river's bottom. I crossed the open ground of a valley in a bend that was above and out of sight of the course he was taking, got into the cover along the river's bank, and followed it down, but saw nothing of him. By and by I came to where the buck had drunk. He had there crossed the river and gone straight on at a long easy trot towards the Sierra Vérde.

"Should he intend going up the mountain my chance of seeing him again that day was over; if he was going to feed in the piñon ridges, then careful stalking and the avoidance of all mistakes would make him my meat. I could not afford to lose time by going to a beaver dam to cross, so at once peeled and waded over.

"After going about two miles, the buck's tracks showed he had subsided into a walk, and then almost immediately turned, to my great satisfaction, into the piñon-ridge country, in which, after about an hour's careful stalking, I sighted him again. He was strolling along, feeding; but it was getting pretty well on towards sunset before I was able to approach close enough to him to care to fire a shot, for I had taken so much trouble that I was determined to incur no risk I could avoid, but have patience until I had a certainty of killing him in his tracks. At last he stopped to browse in a little open, oval table-land, on the summit of a cedar ridge.

"The ridge-top was nowhere over a hundred yards across, and was surrounded with a thick fringe of dwarf cedars. Peeping through one of these dwarf cedars, I could see the deer's broad fat quarters about forty yards

in front of me. The buck was slowly walking from where I stood concealed. I put my cap in a fork of the cedar, laid my rifle-barrel on it, brought its stock to my shoulder, and bleated like a doe.

"The big buck stopped, turned his body half round, his head wholly so, and looked straight towards me with his head down.

"I drew a careful bead between his eyes, and dropped him—stone-dead!

"I ran up to bleed him, feeling quite relieved and glad at so successful a termination of ten hours' difficult hunting. I had not noticed it while engrossed by the interest of pursuit, but now found I was very hungry, and so lit a fire at once, that there might be roasting-coals ready by the time I had skinned my deer.

"I was soon enjoying a jolly rib-roast, making a tremendous meal, and recruiting myself for the tramp of from twelve to fifteen miles lying between me and the camp."

So, after all, we had our Christmas dinner according to programme, and a capital one it was, too.

The turkeys were *à merveille*, the venison delicious; for the big buck—he was nearly as big as a Mexican burro-deer—was very fat indeed. It is only the man who has eaten *really* fat wild venison who knows what good venison *really* is. The kidneys were completely covered with tallow, and my companion assured us that the buck cut nearly an inch of fat on the brisket. The quarters had been hung out to freeze all night, and were thawed in melted snow-water before being cooked, and so were quite tender.

The plum-pudding was over a foot in diameter; we could hardly pull it out of the pot. It was as good as possible, and followed by a bowl of punch, our punch-bowl being for the nonce a tin bucket; not to mince matters, it was our

horses' watering-bucket, which, though not elegant, was capacious, and the only utensil we had capable of holding the amount of punch the occasion called for.

No holly grew in the country, but the bright red berries of the Indian arrow-wood and of the bearberry-bush made beautiful substitutes, and there were more evergreens in sight than entire Christendom could have made use of, so our camp was profusely and gayly decorated. Altogether the day was well and duly celebrated, and it is marked with a white stone in the calendar of my memory.

A COLORADO "ROUND-UP."

ALFRED TERRY BACON.

[Among picturesque scenes of American life there are few to surpass those to be seen on the cattle ranges of the West, the home of the cow-boy, and of a mode of life widely removed from the quiet conditions of ordinary civilization. We append a description of daily scenes during a cattle "drive."]

BY a fortunate circumstance I first saw that pastoral pageant known in the West as a "round-up" among the most picturesque surroundings that could have been chosen for it even in Colorado. In the northern counties the abrupt line of the Rocky Mountain foot-hills has nearly a north-and-south direction. From their base the grass-country rolls away in great brown undulations with a general downward slope towards the east for twenty miles, to the depression in the Plains through which the South Platte flows northward. Beyond the river the land rises again with an easy slope for several miles. It is from the side of this rise of ground that the superb panoramic view

of the Rocky Mountain range is seen in perfection. More than two hundred miles it stretches in sight, from the masses vaguely seen beyond the snowy shoulders of Pike's Peak to the lower mountains across the border of Wyoming.

At a considerable height on this slope runs a canal for irrigation, led out from the swiftly-descending Platte some miles above. One brilliant evening in July, a procession of wagons, each with its arched covering of canvas tinted by the sunset light, moved up the ascent to the bank of the ditch. The wagons were drawn up in line, about a hundred feet apart, and in five minutes each driver had unharnessed and "hobbled" his horses and a bright row of camp-fires were dancing in the twilight. The wagons were late in making a camp. Usually they precede the herd by several hours; but now close following is heard the lowing of the cattle, a slowly swelling volume of sound, as the drove approaches. At a spot a quarter of a mile from camp, where a level interrupts the general slope, the herd is massed together, or, in technical phrase, "bunched," and with the approach of darkness gradually all lie down for the night. One by one the herders drop away to camp as the cattle grow quiet, till but two are left riding in opposite directions about the sleeping herd, each singing vigorously, for the double purpose of warding off sleep and keeping the herd aware of their guard. The songs are continued by the successive watches till dawn, each singer pursuing his tune with a glorious independence of harmony with his mate; yet in the distance, as we sit beside the camp-fire or in waking moments at night, it is a cheerful, vigilant sound. In the cow-boy's dialect, "singing to 'em" has become a synonymous expression for night-herding.

Before the day's work is finished, there is a cry heard

not far away, "Ropes! ropes!" Two men start up from the resting groups and form a sort of temporary corral by stretching ropes from a wagon, and into it is driven the great herd of saddle-horses, to be "hobbled" for the night. Then the supper is served,—hastily cooked and hastily eaten. There is little comfort about it. A kind of lengthened tail-board is let down at the end of each wagon and supported by props. All the men of an "outfit"—that is, those banded to work together and share the use of one wagon—gather about this rude table and devour the meal, as they stand, with the lion's appetite which only a wholly out-door life can give.

Each "outfit" carries its tent, for use in bad weather; but with a dewless night and a dry soil no one cares to stake a tent after fourteen hours of hard riding. As soon as darkness has fairly settled over the earth, we are all rolled in our blankets side by side on the ground as peaceful as a row of mummies. Over us the heaven seems to glitter with a million stars not seen in lower countries, and sleep soon comes to the eyes turned upward towards its infinite calm. At intervals through the night the second, third, and "cocktail" reliefs will be called to go on duty: all hands must take their turns at night-herding.

With the first intimation of daylight the camp-fires are again dancing in line. By each a cook begins his breakfast preparations. Long before the appearance of the sun all the camp is astir; bedding is rolled and packed away ready for transportation. In the universal freshness of dawn the view westward from the hill is glorious. Through the meadows just below us winds the Platte, shaded by noble groves of cottonwood, the home of ten thousand meadow-larks, and already in the starry twilight they have begun a choral symphony of innumerable voices. . . .

But the light of the sun has hardly crept down the hill

to touch the tree-tops, still ringing with the morning song, before the hurried standing breakfast at the camp is over and each man has been appointed to his work by the captain of the "round-up." Three or four are named to guard the herd already gathered; some will have special care of the horses; all others, except the men in charge of wagons, are appointed to go "out on circle." Then follows a general saddling of horses, and, while the shadows still lie long across the plain, knots of horsemen, three or four abreast, strike out across the prairie on lines radiating in all directions from the camp. They will ride out on their courses for about five miles, except where the space is limited on the west by the river, and then, turning back, will drive in towards the centre, or, as they say, will "circle in," or "round up," all the cattle found in that district, a space with a diameter of ten miles. It is this operation carried on day after day over many thousand square miles of country which gives the name "round-up" to the annual gathering of the cattle on the Plains. . . .

The long, hot morning wastes away, unvaried by any event but the changing phases of the mirage and the gathering of cloud-puffs over the mountains. But when the sun has climbed within an hour or two of the meridian, some one less drowsy than the rest shouts, "They're coming!" Across the prairie where he points there is no living thing in sight, but beyond the most distant ridge a great dust-column seems to touch the sky and stand motionless. Then on the opposite horizon we catch sight of another cloud of dust, then another, and another appears, till the circle of approaching herds is complete. Presently the leaders of a procession mount the ridge. The long line of cattle comes steadily on. Half are lost to sight in the hollows of the prairie, half are seen on the crests of the swelling ground. Up and down the line

A KANSAS CYCLONE

FROM THE ONLY SUCCESSFUL PHOTOGRAPH EVER TAKEN

gallop the horsemen, urging and guiding the cattle. When the first sound from the herd reaches the ear, it is like a long trumpet-blast. Among the multitudes that are approaching there is not one but utters some sound of protest at this sudden infringement of the liberties of his wild life. The bellowing of the bulls, the lowing of the cows, the bleating of the calves, all are blended into a musical murmur in which no single voice can be distinguished.

With the advance of the cattle the deep note grows louder by almost imperceptible degrees, but at last, when the lines begin to be driven together at the centre, it has increased to a deafening uproar. Conversation is impossible; orders are shouted as in a storm at sea. When the converging processions have come so near that the animals can be distinguished, it is interesting to look closely at the passing lines, in which every breed and size and color of cattle is represented, from the small tawny Texas cow, as wild as a deer, to the large high-bred Durham bull that paces heavily along nodding his head at every step with an aristocratic air of self-satisfaction. The leaders of a herd are always the strong, fat steers, walking with a quick step, carrying their heads erect, and glancing about with restless eyes,—powerful, swift animals, ready when anything startles them to break into a stampede that will try the mettle of the best horses in the effort to stop them.

To one who has only known cattle in the Eastern States from watching working-oxen crawling along a road a mile and a half in an hour, or mild old dairy-cows loafing home from pasture at night, these spirited wild cattle seem a different race of animals. A new-comer to the plains can hardly believe that cattle are capable of great speed; but let him help in driving a herd for a few days, and his opinion is changed. A small calf lagging in the rear of a herd is sometimes seized with an insane notion that his

mother has been left behind if he loses sight of her for a moment. He starts backward on the trail, "like a streak of greased lightning," his pursuer would say. An accomplished cow-boy is often baffled for some time in such a chase. His horse, of course, will outstrip a calf in a long run; but just when he has headed him off, the exasperating little brute will dodge like a hare, and, while the horse is carried on by his impetus, the calf is off again as fast as ever in search of his forsaken parent. I have known a "tender-foot" to disappear over the bluffs on such a chase in the middle of the afternoon and return at night crestfallen, to acknowledge himself vanquished by a most insignificant little calf.

After the leaders of the herd generally follow the young stock,—the yearlings and two-year-olds,—with the fat dry cows scattered along the line; then the multitude of cows followed by calves; and last the lagging new-born calves, attended and coaxed along by fussy old mothers.

After the men have rushed into camp to swallow the noonday meal and have hurried back to the herd, the hardest and most interesting part of the day's work begins,—that is, the "cutting out," or sorting, the cattle of those brands which it is desired to separate from the promiscuous multitude. In the "general round-up" of the early summer the branding of the young stock is the chief business; but in this gathering the object is to separate certain cattle to be driven away to new grazing-grounds in the northern Territories. As we are riding out with the herders returning to their work, suddenly the body from head to foot is suffused with a sense of relief and refreshment, as when water touches a parched throat; for, after eight hours of scorching heat, a cloud has drifted across the sun as he begins his descent. It is only in such an arid, shadeless region that the scriptural metaphor of a "shadow in a

weary land" can have the full force which it had to its Asiatic author.

But now, as we came to the herd and turned to circle about it, the westward view was wonderfully changed. The background of mountains which in the morning had been so shadeless was now almost wholly in shadow. The cloud-puffs of an hour ago had spread and united into black canopies of storm-cloud. The range had assumed its darkest and most sublime aspect. As the eye runs up and down the long sweep of vision, here and there a white peak, flooded with sunshine from an unseen space between the storms, shines with an unearthly brightness amid the general blackness. Here and there the snowy head of a mountain looks out cold and wan through a transparent veil of showers. Every moment at some point along the rank of mountains a thunderbolt leaps across from cloud to peak with a quick shiver. A portentous darkness settles over the Great Divide. The pine-clad slopes are as black as night; the snowy summits leaden.

In contrast with the dark majesty of the background is the intense animation of the scene close at hand. Back and forth and round and round patrol the horsemen appointed to hold the cattle within certain boundaries. Men representing the owners of brands ride into the crowd of cattle, and, moving slowly about, observe the brand on every animal they pass. Usually a rider represents several owners. Catching sight of the brands for which they are looking, each man follows close at the heels of the cow he has selected, and, when she is near the edge of the herd, with a quick jump of his horse he tries to drive her beyond the boundaries. But commonly she detects his purpose, her gregarious instinct rebels, and with a quicker jump she is back again among her friends in the midst of the herd.

Then follows a hard chase around among the frightened cattle. Fifteen or twenty riders are soon in hot pursuit of their several brands. The whole herd is in commotion, with a general wheeling movement like a slow Maelstrom. The cattle are "ginning around," they say. The din of a thousand bellowing voices grows more thunderous as the herd grows more uneasy. To watch this tossing sea of animal life is exciting in the highest degree. The horses, trained by long experience in the work, dash into it with the fire of a war-horse going to battle. They take evident pleasure in their superiority over the inferior intelligence of the cattle. The showy, barbaric costumes of the cowboys, the exquisite feats of horsemanship, the excitement of the horses warming to their work, the occasional dexterous use of the lasso in subduing some animal at bay, all the rush and tumult, the roar and shouting, the grace of muscular men and animals in swift motion, make up a spectacle so stirring and picturesque that all other exhibitions of equestrian skill seem tame in comparison.

As the cattle one by one are "cut out," they are taken in charge by the outside riders and driven away to swell the herd of those already gathered, which is grazing less than a mile away. After two hours of work, while the commotion seems still as violent as ever, the captain suddenly shouts the order, "Turn 'em loose!" The cry passes along, the guards draw to one side, the liberated cattle move quickly away, first in a body, then in a long scattering line, and the stillness of the desert succeeds the uproar. In the mean time, the camp has been broken up and the train of wagons has moved up the river eight or ten miles to fix a centre for the next day's work. There is little difference between one day and another. The same operation of "circling in" and "cutting out" will be repeated till every acre of ground in the allotted district has been

traversed. In the "general round-ups" of the spring each district contains several thousand square miles, and the work continues for six weeks or more. In this way a belt of country equal in length to the distance from Portland to Savannah is swept over by the "round-ups" every year.

Before this nomadic life of the Plains has been drained of its picturesque elements by the advance of civilization, I hope that some painter may arise who can grasp and worthily fix on canvas this most picturesque scene of American life,—one with the skill of a Church to paint the mountains and the genius of a Bonheur to catch the beauty of free animal existence. It should be a great picture, for in its distance would stand the continent's mountainous head crowned with its shining diadem, while in the nearer view there would be every attitude of bold horsemanship, every phase of intense muscular activity, brilliancy of costumes, the charm of wild life, the beauty of freedom.

AMONG THE COW-BOYS.

LOUIS C. BRADFORD.

[The preceding selection may be fitly followed by the following description of life among the cow-boys, those wild and wilful cattle-guards of the West, whose escapades form an interesting part of the romance of modern times.]

THERE is a peculiar fascination in the wild life of the cow-boys which tempts many young men of culture and refinement, reared in the enjoyment of every luxury in the East, but of adventurous dispositions, to come and live with these rude spirits on the frontier. Often for thirty-six hours continuously in the saddle, the hardships of their

lot are apparent. Cold black coffee, without sugar, drunk whenever the opportunity offers, is the sole luxury of the cow-boy. With a piece of bread in one hand and some jerked beef in the other, he will ride around a stampeded herd, eating as he goes, and as happy as a king on his throne. When night comes, provided his cattle are quiet, he will tie his horse to his leg, and, "covered with his hat," with a hummock of grass for his pillow, will sleep peacefully on the broad prairie, and dream perchance of his sweetheart far back in "God's country."

Perhaps his dreams will be rudely disturbed by the thunder of a thousand hoofs, as his cattle, becoming frightened at some noise, have stampeded, and the grass fairly pops beneath their cloven feet. Then it is he does his tallest riding, and, circling around his cows, brings them back to where they started. If a wild bull becomes obstreperous and unruly, a rider dashes past him, and, seizing his tail as he goes by, gives it a twist around the horn of his saddle, and in a trice the bull is fairly slung heels over head on his back. Two or three applications of this discipline will generally reduce the stiffening in a bull's tail to a minimum and render him as docile as a calf. An expert cow-boy can rope, throw down, and tie up a cow in just one minute from the time he rides up to her.

But a man knows nothing of "punching the heifers" who has not been through on the "trail" to Kansas. Going for days together without eating, never out of the saddle, mounting a fresh horse as fast as one is broken down, the limit of endurance is reached, and one who has stood the test, and can boast of having "busted the Indian Nation square open," attains respect in the cow-boy's eyes, and is considered to have taken his degree.

In 1874 the largest drive to Kansas ever recorded took place, when half a million beeves were driven through.

The trail was beaten into a broad path a mile wide and extending fifteen hundred miles in length. For miles and miles the string of lowing herds stretched along, while the keen riders darted hither and thither, keeping them well on the trail. At night the voices of the men singing to their sleeping cattle could be heard all along the line, while the long string of camp-fires, throwing their lurid glare against the black vault overhead, called back to the minds of many old gray-bearded cow-boys the stormy times when similar lines of light glimmered along the Rappahannock, and pierced the murky gloom of some Virginia night. Sometimes the music of a violin, sounding strangely shrill in the calm night air, would mingle with the deep tones of voices singing "The Maid of Monterey," or "Shamus O'Brien," the cow-boy's favorite tunes.

In passing through the Indian Nation it is no uncommon thing for a band of Indians, all painted and varnished up, to ride down on a beef-herd, and, singling out the finest cattle in the bunch, compel the white owners of the stock to cut them out in a separate flock, when the Indians will gather around them and run them off. Some years ago a party of five Indians came riding down on a herd which was resting on the banks of a small creek, and demanded of the boss herdsman ten of the fattest steers he had. The boss was a bold man, and, looking around on his fifteen stalwart cow-boys, swore that no five Indians should take his beeves from him, and, using the polite phraseology of the Plains, told his redskin visitors to "go to hell." The baffled five retired into the forest, but soon returned with an increased force of fifty men, who charged down on the defiant herdsman, whom they nearly beat to death with his own ramrod, stampeded his cattle, and ran off two hundred of them into the woods.

It is a wild, rough set of men that camp around the

herds after they have been driven through the Nation and are resting on the grassy plains of Kansas. Clad in the soiled and dusty jeans of the trail, for weeks in succession no water has touched their hands or faces, and, unshaven and unshorn, they give free rein to their exuberant spirits, taking some quiet Kansas village by storm, setting the tame local laws at defiance, and compelling the authorities to acknowledge the sovereignty of their native State.

The wages earned by these cow-boys are twenty-five dollars a month while they are herding on Texan ranges; but, as the toil and hardship encountered on the trail are so great, they are paid thirty-five dollars a month during the drive, and each man furnished with eight ponies to ride. Some of them return home by rail, visiting the cities of St. Louis and New Orleans, and managing to be despoiled of all their hard-earned money during their brief sojourn in "God's country;" but the greater number straddle their wiry little ponies and ride back through the Nation to Texas.

Not every one that started out to go up the trail lives to get back, and the nameless mounds that dot the sides of that broad path bear mute but powerful testimony to the danger that every hour surrounds the cow-boy. Whether they fall by a shot from some hostile savage lurking in a ravine near by, or are dropped by a six-shooter in the hands of a fellow-herder, they are hastily buried and soon forgotten. Entirely free from the restraining power of the law, men give free rein to their passions, and the six-shooter or Winchester rifle—the inseparable companions of the stock-drivers—is freely resorted to to settle disputed questions. It is very common for two bosses having charge of different herds to jump down from their horses and proceed to crack away at each other until one has bitten the dust.

When a violent storm, accompanied by thunder and lightning, stampedes the cattle, they will probably get mixed up with two or three other herds, and much labor and confusion results, and a considerable amount of tall swearing and fighting takes place before they can be separated and each herd gotten to itself. Every animal, besides the regular brand of the owner, has his tail bobbed and a "road-mark" put upon him during the drive, and in a mixed herd the rider goes in and "cuts out" all the cattle that bear his brand and runs them into a separate flock.

When cattle are sleeping it requires very little to stampede them. A loud breath, the clank of a chain tied to the leg of a wagon-mule, or the galloping of a horse will sometimes cause them to be up and gone in the twinkling of an eye. They will run over whatever is in their path, and the only way to stop them is to get them to "milling," or travelling in a circle, when they will wind themselves up like a ball and stop. It is instinctive with them to run when anything else is running, and away they go at the slightest noise, with the cow-boys in wild pursuit after them.

Living on Stinking Creek, in the Indian Territory, just off the great trail, is an Irishman named Fitzpatrick, who came to this country not many years ago, a common specimen of the bog-trotting Tipperary Paddy. Floating on the tide of emigration westward, he finally went into the Indian Nation, and, building a cabin in the timber where the trail crossed Stinking Creek, he proceeded to gather up the cattle that dropped from the great herds going through or were lost in some big stampede. His business throve, and in time he married a Choctaw wife and went to housekeeping, and to-day he is the owner of many thousand beeves, and is regarded as a rising stock-man. He

still collects the stampeded cattle in the creek timber,—a striking example of the strange ways in which men become rich. More than one big stock-man in Texas began his career by branding the mavericks, or wild unbranded and unclaimed heifers, found in the river timber. As an instance of the manner in which they worked up a herd, it is related of a successful stock-man that he started with a solitary steer, which he turned loose on the prairie, and *the first year he branded forty calves!* . . .

It was with a feeling of sincere regret that the writer of these lines, meeting with a severe accident, prepared to return to where his home nestled in the Alleghanies, after a sojourn of eighteen months with these wild riders of the plains. Lest the impression be conveyed that these are irreligious and godless men, let the reader fancy a group of men, belted and spurred, seated in a rude arbor, listening reverently to a tall cow-boy who has been selected by unanimous choice to read the Scriptures, and he can form an idea of the last Sunday I spent with the cow-boys. With slow and deliberate utterance, Phil Claiborne read out the words of the golden rule, "As ye would that men should do to you, do ye also to them likewise." Then he proceeded: "These, my hearers, were the words of the Lord Jesus Christ, who spoke as no man ever spoke; and I pledge you my word, gentlemen, the Bible is a good egg." Profound attention greeted the speaker, and continuing, he said, "Whatsoever is earthly can be soon replaced, but that which is on yon side of the grave is eternal. If you lose your property, you may acquire more; if you lose your wife, you may marry again; if you lose your children, you may have more; but if you lose your immortal soul, then up the spout you go."

HUNTING THE BUFFALO.

WASHINGTON IRVING.

[Washington Irving's experiences were not confined to the banks of the Hudson, the ruins of the Alhambra, and the rural scenes of English life, but were extended to embrace the far western region of his own country, a region at that time still the domain of savage nature. In 1832, the year embraced in his "Tour on the Prairies," the buffalo, or bison, now nearly extinct, roamed in vast herds over the treeless plains, and wild horses were little less abundant in the same broad region. The work in question is principally devoted to incidents of a hunter's life in pursuit of these two animals. The scene lies in the vicinity of the upper waters of the Red River.]

After proceeding about two hours in a southerly direction, we emerged towards mid-day from the dreary belt of the Cross Timber, and to our infinite delight beheld "the great prairie," stretching to the right and left before us. We could distinctly trace the meandering course of the main Canadian and various smaller streams by the strips of green forest that bordered them. The landscape was vast and beautiful. There is always an expansion of feeling in looking upon these boundless and fertile wastes; but I was doubly conscious of it after emerging from our "close dungeon of innumerous boughs."

From a rising ground Beatte [an Indian member of the party] pointed out the place where he and his comrades had killed the buffaloes; and we beheld several black objects moving in the distance which he said were part of the herd. The captain determined to shape his course to a woody bottom about a mile distant and to encamp there for a day or two, by way of having a regular buffalo-hunt and getting a supply of provisions.

As the troop defiled along the slope of the hill towards the camping-ground, Beatte proposed to my messmates and myself that we should put ourselves under his guidance, promising to take us where we should have plenty of sport. Leaving the line of march, therefore, we diverged towards the prairie, traversing a small valley and ascending a gentle swell of land. As we reached the summit we beheld a gang of wild horses about a mile off. Beatte was immediately on the alert, and no longer thought of buffalo-hunting. He was mounted on his powerful half-wild horse, with a lariat coiled at the saddle bow, and set off in pursuit, while we remained on a rising ground watching his manœuvres with great solicitude.

Taking advantage of a strip of woodland, he stole quietly along, so as to get close to them before he was perceived. The moment they caught sight of him a grand scamper took place. We watched him skirting along the horizon like a privateer in full chase of a merchantman; at length he passed over the brow of a ridge and down into a shallow valley; in a few moments he was on the opposite hill, and close upon one of the horses. He was soon head and head, and appeared to be trying to noose his prey; but they both disappeared again below the hill, and we saw no more of them. It turned out afterwards that he had noosed a powerful horse, but could not hold him, and had lost his lariat in the attempt.

While we were waiting for his return, we perceived two buffalo bulls descending a slope towards a stream which wound through a ravine fringed with trees. The young count and myself endeavored to get near them under covert of the trees. They discovered us while we were yet three or four hundred yards off, and, turning about, retreated up the rising ground. We urged our horses across the ravine and gave chase. The immense weight of head and

shoulders causes the buffalo to labor heavily up-hill; but it accelerates his descent. We had the advantage, therefore, and gained rapidly upon the fugitives, though it was difficult to get our horses to approach them; their very scent inspired them with terror. The count, who had a double barrelled gun loaded with ball, fired, but missed. The bulls now altered their course, and galloped down-hill with headlong rapidity. As they ran in different directions, we each singled out one and separated.

I was provided with a brace of veteran brass-barrelled pistols which I had borrowed at Fort Gibson, and which had evidently seen some service. Pistols are very effective in buffalo-hunting, as the hunter can ride up close to the animal, and fire at it while at full speed; whereas the long heavy rifles used on the frontier cannot be easily managed nor discharged with accurate aim from horseback. My object, therefore, was to get within pistol-shot of the buffalo. This was no very easy matter. I was well mounted on a horse of excellent speed and bottom that seemed eager for the chase, and soon overtook the game; but the moment he came nearly parallel, he would keep sheering off with ears forked and pricked forward, and every symptom of aversion and alarm. It was no wonder. Of all animals, a buffalo, when close pressed by the hunter, has an aspect the most diabolical. His two short black horns curve out of a huge frontlet of shaggy hair; his eyes glow like coals; his mouth is open, his tongue parched and drawn up into a half crescent; his tail is erect, and tufted and whisked about in the air; he is a perfect picture of mingled rage and terror.

It was with difficulty I urged my horse sufficiently near, when, taking aim, to my chagrin, both pistols missed fire. Unfortunately, the locks of these veteran weapons were so much worn that in the gallop the priming had been shaken

out of the pans. At the snapping of the last pistol I was close upon the buffalo, when, in his despair, he turned round with a sudden snort and rushed upon me. My horse wheeled about as if on a pivot, made a convulsive spring, and, as I had been leaning on one side with pistol extended, I came near being thrown at the feet of the buffalo.

Three or four bounds of the horse carried us out of the reach of the enemy; who, having merely turned in desperate self-defence, quickly resumed his flight. As soon as I could gather in my panic-stricken horse and prime the pistols afresh, I again spurred in pursuit of the buffalo, who had slackened his speed to take breath. On my approach he again set off full tilt, heaving himself forward with a heavy rolling gallop, dashing with headlong precipitation through brakes and ravines, while several deer and wolves, startled from their coverts by his thundering career, ran helter-skelter to right and left across the waste.

A gallop across the prairies in pursuit of game is by no means so smooth a career as those may imagine who have only the idea of an open level plain. It is true, the prairies of the hunting-ground are not so much entangled with flowering plants and long herbage as the lower prairies, and are principally covered with short buffalo-grass; but they are diversified by hill and dale, and where most level are apt to be cut up by deep rifts and ravines, made by torrents after rains; and which, after yawning from an even surface, are almost like pitfalls in the way of the hunter, checking him suddenly when in full career, or subjecting him to the risk of limb and life. The plains, too, are beset by burrowing holes of small animals, in which the horse is apt to sink to the fetlock, and throw both himself and his rider. The late rain had covered some parts of the prairie, where the ground was hard, with

a thin sheet of water, through which the horse had to splash his way. In other parts there were innumerable shallow hollows, eight or ten feet in diameter, made by the buffaloes, who wallow in sand and mud like swine. These being filled with water, shone like mirrors, so that the horse was continually leaping over them or springing on one side. We had reached, too, a rough part of the prairie, very much broken and cut up; the buffalo, who was running for life, took no heed to his course, plunging down break-neck ravines, where it was necessary to skirt the borders in search of a safer descent. At length we came to where a winter stream had torn a deep chasm across the whole prairie, leaving open jagged rocks, and forming a long glen bordered by steep crumbling cliffs of mingled stone and clay. Down one of these the buffalo flung himself, half tumbling, half leaping, and then scuttled along the bottom; while I, seeing all further pursuit useless, pulled up, and gazed quietly after him from the border of the cliff, until he disappeared amidst the windings of the ravine.

Nothing now remained but to turn my steed and rejoin my companions. Here at first was some little difficulty. The ardor of the chase had betrayed me into a long, heedless gallop. I now found myself in the midst of a lonely waste, in which the prospect was bounded by undulating swells of land, naked and uniform, where, from the deficiency of landmarks and distinct features, an inexperienced man may become bewildered, and lose his way as readily as in the wastes of the ocean. The day, too, was overcast, so that I could not guide myself by the sun; my only mode was to retrace the track my horse had made in coming, though this I would often lose sight of, where the ground was covered with parched herbage.

To one unaccustomed to it, there is something inex-

pressibly lonely in the solitude of a prairie. The loneliness of a forest seems nothing to it. There the view is shut in by trees, and the imagination is left free to picture some livelier scene beyond. But here we have an immense extent of landscape without a sign of human existence. We have the consciousness of being far, far beyond the bounds of human habitation; we feel as if moving in the midst of a desert world. As my horse lagged slowly back over the scenes of our late scamper, and the delirium of the chase had passed away, I was peculiarly sensible to these circumstances. The silence of the waste was now and then broken by the cry of a distant flock of pelicans, stalking like spectres about a shallow pool; sometimes by the sinister croaking of a raven in the air, while occasionally a scoundrel wolf would scour off from before me, and, having attained a safe distance, would sit down and howl and whine with tones that gave a dreariness to the surrounding solitude.

After pursuing my way for some time, I descried a horseman on the edge of a distant hill, and soon recognized him to be the count. He had been equally unsuccessful with myself; we were shortly afterwards rejoined by our worthy comrade, the Virtuoso, who, with spectacles on nose, had made two or three ineffectual shots from horseback.

We determined not to seek the camp until we had made one more effort. Casting our eyes about the surrounding waste, we descried a herd of buffalo about two miles distant, scattered apart, and quietly grazing near a small strip of trees and bushes. It required but little stretch of fancy to picture them as so many cattle grazing on the edge of a common, and that the grove might shelter some lowly farm-house.

We now formed our plan to circumvent the herd, and by getting on the other side of them, to hunt them in the

direction where we knew our camp to be situated; otherwise, the pursuit might take us to such a distance as to render it impossible for us to find our way back before night-fall. Taking a wide circuit, therefore, we moved slowly and cautiously, pausing occasionally when we saw any of the herd desist from grazing. The wind fortunately set from them, otherwise they might have scented us and have taken the alarm. In this way we succeeded in getting round the herd without disturbing it. It consisted of about forty head, bulls, cows, and calves.

Separating to some distance from each other, we now approached slowly in a parallel line, hoping by degrees to steal near without exciting attention. They began, however, to move off quietly, stopping at every step or two to graze, when suddenly a bull that, unobserved by us, had been taking his siesta under a clump of trees to our left, roused himself from his lair and hastened to join his companions. We were still at a considerable distance, but the game had taken the alarm. We quickened our pace, they broke into a gallop, and now commenced a full chase.

As the ground was level, they shouldered along with great speed, following each other in a line; two or three bulls bringing up the rear, the last of whom, from his enormous size and venerable frontlet, and beard of sunburnt hair, looked like the patriarch of the herd, and as if he might long have reigned the monarch of the prairie.

There is a mixture of the awful and the comic in the look of these huge animals, as they bear their great bulk forward, with an up-and-down motion of the unwieldy head and shoulders, their tail cocked up like the queue of Pantaloon in a pantomime, the end whisking about in a fierce yet whimsical style, and their eyes glaring venomously with an expression of fright and fury.

For some time I kept parallel with the line without

being able to force my horse within pistol-shot, so much had he been alarmed by the assault of the buffalo in the preceding chase. At length I succeeded, but was again balked by my pistols missing fire. My companions, whose horses were less fleet and more way-worn, could not overtake the herd; at length Mr. L——, who was in the rear of the line and losing ground, levelled his double-barrelled gun and fired a long raking shot. It struck a buffalo just above the loins, broke its backbone, and brought it to the ground. He stopped and alighted to despatch his prey, when, borrowing his gun, which had yet a charge remaining in it, I put my horse to his speed, and again overtook the herd, which was thundering along, pursued by the count. With my present weapon there was no need of urging my horse to such close quarters; galloping along parallel, therefore, I singled out a buffalo, and by a fortunate shot brought it down on the spot. The ball had struck a vital part; it would not move from the place where it fell, but lay there struggling in mortal agony, while the rest of the herd kept on their headlong career across the prairie.

Dismounting, I now fettered my horse to prevent his straying, and advanced to contemplate my victim. I am nothing of a sportsman: I had been prompted to this unwonted exploit by the magnitude of the game and the excitement of an adventurous chase. Now that the excitement was over, I could but look with commiseration upon the poor animal that lay struggling and bleeding at my feet. His very size and importance, which had before inspired me with eagerness, now increased my compunction. It seemed as if I had inflicted pain in proportion to the bulk of my victim, and as if there were a hundred-fold greater waste of life than there would have been in the destruction of an animal of inferior size.

To add to these after-qualms of conscience, the poor animal lingered in his agony. He had evidently received a mortal wound, but death might be long in coming. It would not do to leave him here to be torn piecemeal, while yet alive, by the wolves that had already snuffed his blood, and were skulking and howling at a distance, and waiting for my departure, and by the ravens that were flapping about croaking dismally in the air. It became now an act of mercy to give him his quietus and put him out of his misery. I primed one of the pistols, therefore, and advanced close up to the buffalo. To inflict a wound thus in cool blood I found a totally different thing from firing in the heat of the chase. Taking aim, however, just behind the fore shoulder, my pistol for once proved true; the ball must have passed through the heart, for the animal gave one convulsive throe and expired.

While I stood meditating and moralizing over the wreck I had so wantonly produced, with my horse grazing near me, I was rejoined by my fellow-sportsman the Virtuoso; who, being a man of universal adroitness, and withal, more experienced and hardened in the gentle art of "venerie," soon managed to carve out the tongue of the buffalo, and delivered it to me to bear back to the camp as a trophy.

Our solicitude was now awakened for the young count. With his usual eagerness and impetuosity he had persisted in urging his jaded horse in pursuit of the herd, unwilling to return without having likewise killed a buffalo. In this way he had kept on following them hither and thither, and occasionally firing an ineffectual shot, until by degrees horseman and herd became indistinct in the distance, and at length swelling ground and strips of trees and thickets hid them entirely from sight.

By the time my friend, the amateur, joined me, the young count had been long lost to view. We held a con-

sultation on the matter. Evening was drawing on. Were we to pursue him, it would be dark before we should overtake him, granting we did not entirely lose trace of him in the gloom. We should then be too much bewildered to find our way back to the encampment; even now our return would be difficult. We determined, therefore, to hasten to the camp as speedily as possible, and send out our half-breeds and some of the veteran hunters, skilled in cruising about the prairies, to search for our companion.

We accordingly set forward in what we supposed to be the direction of the camp. Our weary horses could hardly be urged beyond a walk. The twilight thickened upon us; the landscape grew gradually indistinct; we tried in vain to recognize various landmarks which we had noted in the morning. The features of a prairie are so similar as to baffle the eye of any but an Indian or a practised woodsman. At length night closed in. We hoped to see the distant glare of camp-fires; we listened to catch the sound of the bells about the necks of the grazing horses. Once or twice we thought we distinguished them: we were mistaken. Nothing was to be heard but a monotonous concert of insects, with now and then the dismal howl of wolves mingling with the night breeze. We began to think of halting for the night and bivouacking under the lee of some thicket. We had implements to strike a light; there was plenty of firewood at hand, and the tongues of our buffaloes would furnish us with a repast.

Just as we were preparing to dismount we heard the report of a rifle, and shortly after the notes of the bugle, calling up the night guard. Pushing forward in that direction, the camp-fires soon broke on our sight, gleaming at a distance from among the thick groves of an alluvial bottom.

As we entered the camp, we found it a scene of rude

hunters' revelry and wassail. There had been a grand day's sport, in which all had taken a part. Eight buffaloes had been killed; roaring fires were blazing on every side; all hands were feasting upon roasted joints, broiled marrow bones, and the juicy hump, far famed among the epicures of the prairies. Right glad were we to dismount and partake of the sturdy cheer, for we had been on our weary horses since morning without tasting food.

[It may be said in conclusion that the count—a young Swiss who accompanied the party—failed to return, and the next day a search for him had to be made, in which the Indians displayed strikingly their surprising skill in following a trail. The missing adventurer was at length found. He had spent the night in a tree for fear of wolves, and was heartily glad to see the face of his fellow-man again.]

IN THE COUNTRY OF THE SIOUX.

MERIWETHER LEWIS.

[The following selection, here attributed to Captain M. Lewis, is taken from McVickar's abridgment of the journals of Lewis and Clarke, the leaders of the celebrated expedition of 1804–6, sent out by President Jefferson to explore the country which he had obtained by treaty from France as part of the Louisiana purchase. The explorers passed across the plains and the Rocky Mountains while their pristine conditions were as yet undisturbed by the "white man's foot," and their story is of particular value from this fact. We take up their story in their journey through the Sioux country, on the Missouri. They had just passed a village of the Poncara tribe.]

TWENTY miles farther on [continues the narrative] we reached and encamped at the foot of a round mountain on the south, having passed two small islands. This mountain, which is about three hundred feet at the base, forms

a cone at the top, resembling a dome at a distance, and seventy feet or more above the surrounding highlands. As we descended from this dome, we arrived at a spot on the gradual descent of the hill, nearly four acres in extent, and covered with small holes; these are the residence of a little animal, called by the French petit chien (little dog), which sit erect near the mouth, and make a whistling noise, but, when alarmed, take refuge in their holes. In order to bring them out, we poured into one of the holes five barrels of water, without filling it, but we dislodged and caught the owner. After digging down another of the holes for six feet, we found, on running a pole into it, that we had not yet dug half-way to the bottom; we discovered, however, two frogs in the hole, and near it we killed a dark rattlesnake, which had swallowed a small prairie-dog. We were also informed, though we never witnessed the fact, that a sort of lizard and a snake live habitually with these animals. The petit chien are justly named, as they resemble a small dog in some particulars, although they have also some points of similarity to the squirrel. The head resembles the squirrel in every respect, except that the ear is shorter; the tail like that of the ground-squirrel; the toe-nails are long, the fur is fine, and the long hair is gray.

The following days they saw large herds of buffalo, and the copses of timber appeared to contain elk and deer. Just below Cedar Island [adds the journal], on a hill to the south, is the backbone of a fish, forty-five feet long, tapering towards the tail, and in a perfect state of petrifaction, fragments of which were collected and sent to Washington. . . .

September 17.—While some of the party were engaged in the same way as yesterday, others were employed in examining the surrounding country. About a quarter of a mile beyond our camp, and at an elevation of twenty feet above

it, a plain extends nearly three miles parallel to the river, and about a mile back to the hills, towards which it gradually ascends. Here we saw a grove of plum-trees, loaded with fruit, now ripe, and differing in nothing from those of the Atlantic States, except that the tree is smaller and more thickly set. The ground of the plain is occupied by the burrows of multitudes of barking squirrels, who entice hither the wolves of a small kind, hawks, and polecats, all of which animals we saw, and presumed that they fed on the squirrel. This plain is intersected, nearly in its whole extent, by deep ravines, and steep, irregular rising grounds, from one to two hundred feet. On ascending the range of hills which border the plain, we saw a second high level plain, stretching to the south as far as the eye could reach. To the westward a high range of hills, about twenty miles distant, runs nearly north and south, but not to any great extent, as their rise and termination is embraced by one view, and they seemed covered with a verdure similar to that of the plains. The same view extended over the irregular hills which border the northern side of the Missouri.

All around, the country had been recently burned, and a young green grass about four inches high covered the ground, which was enlivened by herds of antelopes and buffalo, the last of which were in such multitudes that we cannot exaggerate in saying that at a single glance we saw three thousand of them before us. Of all the animals we had seen, the antelope seems to possess the most wonderful fleetness. Shy and timorous, they generally repose only on the ridges, which command a view of all the approaches of an enemy; the acuteness of their sight distinguishes the most distant danger; the delicate sensibility of their smell defeats the precautions of concealment; and, when alarmed, their rapid career seems more like the flight of birds than

the movements of a quadruped. After many unsuccessful attempts, Captain Lewis at last, by winding around the ridges, approached a party of seven, which were on an eminence towards which the wind was unfortunately blowing. The only male of the party frequently encircled the summit of the hill, as if to announce any danger to the females, which formed a group at the top. Although they did not see Captain Lewis, the smell alarmed them, and they fled when he was at the distance of two hundred yards; he immediately ran to the spot where they had been; a ravine concealed them from him; but the next moment they appeared on a second ridge, at a distance of three miles. He doubted whether they could be the same; but their number, and the extreme rapidity with which they continued their course, convinced him that they must have gone with a speed equal to that of the most distinguished race-horse. Among our acquisitions to-day were a mule deer, a magpie, a common deer, and a buffalo. Captain Lewis also saw a hare, and killed a rattlesnake near the burrows of the barking squirrels.

September 18.—Having everything in readiness, we proceeded, with the boat much lightened, but the wind being from the northwest, we made but little way. At one mile we reached an island in the middle of the river, nearly a mile in length, and covered with red cedar; at its extremity a small creek comes in from the north. We then met some sand-bars, and the wind being very high and ahead, we encamped on the south, having made only seven miles. In addition to the common deer, which were in great abundance, we saw goats, elk, buffalo, and the black-tailed deer; the large wolves, too, are very numerous, and have long hair with coarse fur, and are of a light color. A small species of wolf, about the size of a gray fox, was also killed, and proved to be the animal which we had hitherto mis-

taken for a fox. There are also many porcupines, rabbits, and barking squirrels in the neighborhood. . . .

On the 20th they arrived at the Grand Detour, or Great Bend, and two men were despatched with the only horse, to hunt, and wait the arrival of the boats beyond it. After proceeding twenty-seven and a half miles farther, they encamped on a sand-bar in the river. Captain Clarke [continues the narrative], who early this morning had crossed the neck of the bend, joined us in the evening. At the narrowest part the gorge is composed of high and irregular hills of about one hundred and eighty or one hundred and ninety feet in elevation; from this descends an unbroken plain over the whole of the bend, and the country is separated from it by this ridge. Great numbers of buffalo, elk, and goats are wandering over these plains, accompanied by grouse and larks. Captain Clarke saw a hare, also, on the Great Bend.

Of the goats killed to-day, one is a female, differing from the male in being smaller in size; its horns, too, are smaller and straighter, having one short prong, and no black about the neck. None of these goats have any beard, but are delicately formed and very beautiful.

Shortly after midnight the sleepers were startled by the sergeant on guard crying out that the sand-bar was sinking, and the alarm was given; for scarcely had they got off with the boats before the bank under which they had been lying fell in; and by the time the opposite shore was reached the ground on which they had been encamped sunk also. A man who was sent to step off the distance across the head of the bend made it but two thousand yards, while its circuit is thirty miles. On the 22d they passed a creek and two islands, known by the name of the Three Sisters, where a beautiful plain extended on both sides of the river. This is followed by an island on

the north, called Cedar Island, about one mile and a half in length, and the same distance in breadth, and deriving its name from the quality of its timber. On the south side of this island is a fort and a large trading-house, built by a Mr. Loisel in order to trade with the Sioux, the remains of whose camps are in great numbers about this place. The establishment is sixty or seventy feet square, built with red cedar, and picketed in with the same materials.

The next day, in the evening, three boys of the Sioux nation swam across the river, and informed them that two parties of Sioux were encamped on the next river, one consisting of eighty and the second of sixty lodges, at some distance above. After treating them kindly, they sent them back with a present of two carrots of tobacco to their chiefs, whom they invited to a conference in the morning.

September 24.—At an island a few miles above High-water Creek they were joined by one of their hunters, who [proceeds the narrative] procured four elk; but while he was in pursuit of the game the Indians had stolen his horse. We left the island, and soon overtook five Indians on the shore; we anchored, and told them from the boat we were friends, and wished to continue so, but were not afraid of any Indians; that some of their young men had stolen the horse which their great father had sent for their great chief, and that we could not treat with them until he was restored. They said they knew nothing of the horse, but if he had been taken he should be given up. We went on, and at thirteen and a half miles we anchored one hundred yards off the mouth of a river on the south side, where we were joined by both the pirogues, and encamped; two-thirds of the party remained on board, and the rest went as a guard on shore, with the cooks and one pirogue; we have seen along the sides of the hills on the north a great deal of stone; besides the elk, we also observed a hare; the

five Indians whom we had seen followed us, and slept with the guard on shore. Finding one of them was a chief, we smoked with him, and made him a present of tobacco. This river is about seventy yards wide, and has a considerable current. As the tribe of the Sioux which inhabit it are called Tetons, we gave it the name of Teton River.

[On the 25th they met a party of Indians who threatened violence, and attempted to detain them by force, but were induced to desist by a threatening attitude on the part of the whites.]

September 26.—Our conduct yesterday seemed to have inspired the Indians with fear of us; and as we were desirous of cultivating their acquaintance, we complied with their wish that we should give them an opportunity of treating us well, and also suffer their squaws and children to see us and our boat, which would be perfectly new to them. Accordingly, after passing, at one and a half miles, a small willow island and several sand-bars, we came to on the south side, where a crowd of men, women, and children were waiting to receive us. Captain Lewis went on shore, and remained several hours; and observing that their disposition was friendly, we resolved to remain during the night to a dance, which they were preparing for us. Captains Lewis and Clarke, who went on shore one after the other, were met on landing by ten well-dressed young men, who took them up in a robe, highly decorated, and carried them to a large council-house, where they were placed on a dressed buffalo-skin by the side of the grand chief. The hall, or council-room, was in the shape of three-quarters of a circle, covered at the top and sides with skins well dressed and sewed together. Under this shelter sat about seventy men, forming a circle round the chief, before whom were placed a Spanish flag and the one we had given them yesterday.

This left a vacant circle of about six feet in diameter, in which the pipe of peace was raised on two forked sticks, about six or eight inches from the ground, and under it the down of the swan was scattered; a large fire, in which they were cooking provisions, stood near, and in the centre about four hundred pounds of excellent buffalo-meat, as a present for us.

As soon as we were seated an old man got up, and after approving what we had done, begged us to take pity on their unfortunate situation. To this we replied with assurances of protection. After he had ceased, the great chief rose and delivered an harangue to the same effect; then, with great solemnity, took some of the most delicate parts of the dog which was cooked for the festival, and held it to the flag by way of sacrifice; this done, he held up the pipe of peace, and first pointed it towards the heavens, then to the four quarters of the globe, and then to the earth, made a short speech, lighted the pipe, and presented it to us. We smoked, and he again harangued his people, after which the repast was served up to us. It consisted of the dog which they had just been cooking, this being a great dish among the Sioux, and used on all festivals; to this were added pemitigon, a dish made of buffalo-meat, dried or jerked, and then pounded and mixed raw with grease and a kind of ground potato, dressed like the preparation of Indian corn called hommony, to which it is little inferior. Of all these luxuries, which were placed before us in platters with horn spoons, we took the pemitigon and the potato, which we found good, but we could as yet partake but sparingly of the dog.

We ate and smoked for an hour, when it became dark; everything was then cleared away for the dance, a large fire being made in the centre of the house, giving at once light and warmth to the ball-room. The orchestra was

composed of about ten men, who played on a sort of tambourine, formed of skin stretched across a hoop, and made a jingling noise with a long stick to which the hoofs of deer and goats were hung; the third instrument was a small skin bag with pebbles in it; these, with five or six young men for the vocal part, made up the band. The women then came forward, highly decorated; some with poles in their hands, on which were hung the scalps of their enemies; others with guns, spears, or different trophies taken in war by their husbands, brothers, or connections.

Having arranged themselves in two columns, one on each side of the fire, as soon as the music began they danced towards each other till they met in the centre, when the rattles were shaken, and they all shouted and returned back to their places. They have no step, but shuffle along the ground; nor does the music appear to be anything more than a confusion of noises, distinguished only by hard or gentle blows upon the buffalo-skin; the song is perfectly extemporaneous. In the pauses of the dance some man of the company comes forward and recites, in a sort of low guttural tone, some little story or incident, which is either martial or ludicrous, or, as was the case this evening, voluptuous and indecent; this is taken up by the orchestra and the dancers, who repeat it in a higher strain and dance to it. Sometimes they alternate, the orchestra first performing, and when it ceases the women raise their voices, and make a music more agreeable, that is, less intolerable, than that of the musicians.

The dances of the men, which are always separate from those of the women, are conducted very nearly in the same way, except that the men jump up and down instead of shuffling; and in the war-dances the recitations are all of a military cast. The harmony of the entertainment had nearly been disturbed by one of the musicians, who, think-

ing he had not received a due share of the tobacco we had distributed during the evening, put himself into a passion, broke one of the drums, threw two of them into the fire, and left the band. They were taken out of the fire; a buffalo robe, held in one hand, and beaten with the other by several of the company, supplied the place of the lost drum or tambourine, and no notice was taken of the offensive conduct of the man. We stayed till twelve o'clock at night, when we informed the chiefs that they must be fatigued with all these attempts to amuse us, and retired, accompanied by four chiefs, two of whom spent the night with us on board. . . .

The tribe which we this day saw are a part of the great Sioux nation, and are known by the name of the Teton Okandandas: they are about two hundred men in number, and their chief residence is on both sides of the Missouri, between the Chayenne and Teton Rivers. In their persons they are rather ugly and ill made, their legs and arms being too small, their cheek-bones high, and their eyes projecting. The females, with the same character of form, are more handsome; and both sexes appear cheerful and sprightly; but in our intercourse with them we discovered that they were cunning and vicious. . . .

Their lodges are very neatly constructed, in the same form as those of the Yanktons: they consist of about one hundred cabins (made of white buffalo dressed hide), with a larger one in the centre for holding councils and dances. They are built round with poles, about fifteen or twenty feet high, covered with white skins. These lodges may be taken to pieces, packed up, and carried with the nation wherever they go, by dogs which bear great burdens. The women are chiefly employed in dressing buffalo-skins; they seem perfectly well disposed, but are addicted to stealing anything which they can take without being ob-

served. This nation, although it makes so many ravages among its neighbors, is badly supplied with guns. The water which they carry with them is contained chiefly in the paunches of deer and other animals, and they make use of wooden bowls. Some had their heads shaved, which we found was a species of mourning for their relations. Another usage on these occasions is to run arrows through the flesh, both above and below the elbow.

While on shore to-day we witnessed a quarrel between two squaws, which appeared to be growing every moment more boisterous, when a man came forward, at whose approach every one seemed terrified and ran. He took the squaws, and without any ceremony whipped them severely. On inquiring into the nature of such summary justice, we learned that this man was an officer well known to this and many other tribes. His duty is to keep the peace; and the whole interior police of the village is confided to two or three of these officers, who are named by the chief, and remain in power some days, at least till the chief appoints a successor: they seem to be a sort of constable or sentinel, since they are always on the watch to keep tranquillity during the day, and guarding the camp in the night. The short duration of their office is compensated by its authority. Their power is supreme, and in the suppression of any riot or disturbance no resistance to them is suffered; their persons are sacred; and if, in the execution of their duty, they strike even a chief of the second class, they cannot be punished for this salutary insolence.

THE GREAT FALLS OF THE MISSOURI.

WILLIAM CLARKE.

[The journals of Lewis and Clarke, descriptive of their observations in the western United States during their journey across the plains and mountains to the Pacific, are full of interesting incident. They were the first intelligent travellers through that vast region, and the story of their journey must always possess a high value for this reason, the aborigines and the animal life of that country being as yet undisturbed by the presence of the whites. They had now reached the upper Missouri and were within view of the Rocky Mountains. We quote from McVickar's abridgment of their journals.]

ON the north we passed a precipice about one hundred and twenty feet high, under which lay scattered the remains of at least one hundred carcasses of buffaloes, although the water, which had washed away the lower part of the hill, must have carried off many of the dead.

These buffaloes had been chased down the precipice in a way very common on the Missouri, and by which vast herds are destroyed in a moment. The mode of hunting is to select one of the most active and fleet young men, who is disguised by a buffalo-skin round his body; the skin of the head, with the ears and horns, being fastened on his own in such a way as to deceive the animal. Thus dressed, he fixes himself at a convenient distance between a herd of buffaloes and any of the river precipices, which sometimes extend for miles. His companions in the mean time get in the rear and on the sides of the herd, and at a given signal show themselves and advance towards them. The buffaloes instantly take the alarm, and, finding the hunters beside them, they run towards the disguised Indian or decoy, who leads them on at full speed towards the river,

when, suddenly securing himself in some crevice of the cliff which he had previously fixed on, the herd is left on the brink of the precipice. It is then impossible for the foremost to retreat, or even to stop; they are pressed on by the hindmost rank, which, seeing no danger but from the hunters, goad on those before them, till the whole are precipitated over the cliff, and the shore is strewed with their dead bodies.

Sometimes, in this perilous seduction, the Indian himself is either trodden underfoot by the rapid movements of the buffaloes, or, missing his footing in the cliff, is urged down the precipice by the falling herd. The Indians then select as much meat as they wish, and the rest is abandoned to the wolves, and creates a most dreadful stench. The wolves which had been feasting on these carcasses were very fat, and so gentle that one of them was killed with a spontoon.

[They were now on the foot-hills of the mountains, in the country of the Minnetarees. Their journey met with obstructions from precipitous cliffs.]

These hills and river cliffs exhibit a most extraordinary and romantic appearance. They rise in most places nearly perpendicular from the river to the height of between two and three hundred feet, and are formed of very white sandstone, so soft as to yield readily to the action of water, but in the upper part of which lie embedded two or three thin horizontal strata of white freestone unaffected by the rain; and on the top is a dark rich loam, which forms a gradually ascending plain, from a mile to a mile and a half in extent, when the hills again rise abruptly to the height of about three hundred feet more. In trickling down the cliffs the water has worn the soft sandstone into a thousand grotesque figures, among which, with a little fancy, may

be discerned elegant ranges of freestone buildings, with columns variously sculptured, and supporting long and elegant galleries, while the parapets are adorned with statuary. On a nearer approach they represent every form of elegant ruins, columns, some with pedestals and capitals entire, others mutilated and prostrate, and some rising pyramidally over each other till they terminate in a sharp point. These are varied by niches, alcoves, and the customary appearances of desolated magnificence. The delusion is increased by the number of martins which have built their globular nest in the niches, and hover over these columns as in our country they are accustomed to frequent large stone structures.

As we advance there seems no end to the visionary enchantment that surrounds us. In the midst of this fantastic scenery are vast ranges of walls, which seem the productions of art, so regular is the workmanship. They rise perpendicularly from the river, sometimes to the height of one hundred feet, varying in thickness from one to twelve feet, being equally broad at the top as below. The stones of which they are formed are black, thick, and durable, composed of a large portion of earth, intermixed and cemented with a small quantity of sand, and a considerable proportion of talc or quartz. These stones are almost invariably parallelopipeds of unequal sizes in the wall, but equally deep, and laid regularly in ranges over each other like bricks, each breaking and covering the interstice of the two on which it rests. But, though the perpendicular interstice be destroyed, the horizontal one extends entirely through the whole work. The stones, too, are proportioned to the thickness of the wall in which they are employed, being largest in the thickest walls. The thinner walls are composed of a single depth of the parallelopiped, while the thicker ones consist of two or more

SHOSHONE FALLS, IDAHO

depths. These walls pass the river at several places, rising from the water's edge much above the sandstone bluffs, which they seem to penetrate; thence they cross in a straight line, on either side of the river, the plains, over which they tower to the height of from ten to seventy feet, until they lose themselves in the second range of hills. Sometimes they run parallel in several ranges near to each other, sometimes intersect each other at right angles, and have the appearance of walls of ancient houses or gardens.

[After advancing some distance farther, the proper course to pursue became doubtful, and Captains Lewis and Clarke set out in different directions with exploring parties. Lewis's journey proved an adventurous one.]

In passing along the side of a bluff at a narrow pass, thirty yards in length, Captain Lewis slipped, and, but for a fortunate recovery by means of his spontoon, would have been precipitated into the river over a precipice of about ninety feet. He had just reached a spot where, by the assistance of his spontoon, he could stand with tolerable safety, when he heard a voice behind him cry out, "Good God, captain, what shall I do?" He turned instantly, and found it was Windsor, who had lost his foothold about the middle of the narrow pass, and had slipped down to the very verge of the precipice, where he lay on his belly, with his right arm and leg over it, while with the other leg and arm he was with difficulty holding on, to keep himself from being dashed to pieces below.

His dreadful situation was instantly perceived by Captain Lewis, who, stifling his alarm, calmly told him that he was in no danger; that he should take his knife out of his belt with the right hand, and dig a hole in the side of the bluff to receive his right foot. With great presence

of mind he did this, and then raised himself on his knees. Captain Lewis then told him to take off his moccasins, and come forward on his hands and knees, holding the knife in one hand and his rifle in the other. He immediately crawled in this way till he came to a secure spot. The men who had not attempted this passage were ordered to return, and wade the river at the foot of the bluff, where they found the water breast-high.

This adventure taught them the danger of crossing the slippery heights of the river; but, as the plains were intersected by deep ravines almost as difficult to pass, they continued down the stream, sometimes in the mud of the low grounds, sometimes up to their arms in water, and, when it became too deep to wade, they cut footholds with their knives in the sides of the banks. In this way they travelled through the rain, mud, and water, and, having made only eighteen miles during the whole day, encamped in an old Indian lodge of sticks, which afforded them a dry shelter. Here they cooked part of six deer they had killed in the course of the route, and, having eaten the only morsel they had tasted during the whole day, slept comfortably on some willow-boughs.

[A few days afterwards, Captain Lewis reached the Falls of the Missouri, which he eloquently describes.]

To the southwest [says the journalist] there arose from this plain two mountains of a singular appearance, and more like ramparts of high fortifications than works of nature. They are square figures, with sides rising perpendicularly to the height of two hundred and fifty feet, formed of yellow clay, and the tops seemed to be level plains. Finding that the river here bore considerably to the south, and fearful of passing the falls before reaching the Rocky Mountains, they now changed their course to

the south, and, leaving those insulated hills to the right, proceeded across the plain.

In this direction Captain Lewis had gone about two miles, when his ears were saluted with the agreeable sound of a fall of water; and, as he advanced, a spray, which seemed driven by the southwest wind, arose above the plain like a column of smoke, and vanished in an instant. Towards this point he directed his steps, and the noise, increasing as he approached, soon became too tremendous to be mistaken for anything but the Great Falls of the Missouri.

Having travelled seven miles after first hearing the sound, he reached the Falls about twelve o'clock. The hills, as he approached, were difficult of access, and two hundred feet high; down these he hurried with impatience, and, seating himself on some rocks under the centre of the Falls, enjoyed the sublime spectacle of this stupendous object, which since the creation had been lavishing its magnificence upon the desert, unknown to civilization.

The river, immediately at its cascade, is three hundred yards wide, and is pressed by a perpendicular cliff on the left, which rises to about one hundred feet, and extends up the stream for a mile; on the right the bluff is also perpendicular for three hundred yards above the fall. For ninety or a hundred feet from the left cliff the water falls in one smooth, even sheet over a precipice of at least eighty feet. The remaining part of the river precipitates itself with a more rapid current, and, being received as it falls by the irregular and somewhat projecting rocks below, forms a splendid spectacle of perfectly white foam, two hundred yards in length and eighty in perpendicular elevation. This spray is dissipated into a thousand shapes, sometimes flying up in columns of fifteen or twenty feet, which are then oppressed by larger masses of the white foam, on all

which the sun impresses the brightest colors of the rainbow.

Below the fall the water beats with fury against a ledge of rocks, which extends across the river at one hundred and fifty yards from the precipice. From the perpendicular cliff on the north to the distance of one hundred and twenty yards the rocks are only a few feet above the water, and, when the river is high, the stream finds a channel across them forty yards wide, and near the higher parts of the ledge, which rise about twenty feet, and terminate abruptly within eighty or ninety yards of the southern side. Between them and the perpendicular cliff on the south the whole body of water runs with great swiftness.

A few small cedars grow near this ridge of rocks, which serves as a barrier to defend a small plain of about three acres, shaded with cottonwood; at the lower extremity of which is a grove of the same trees, where are several Indian cabins of sticks; below which the river is divided by a large rock, several feet above the surface of the water, and extending down the stream for twenty yards. At the distance of three hundred yards from the same ridge is a second abutment of solid perpendicular rock, about sixty feet high, projecting at right angles from the small plain on the north for one hundred and thirty-four yards into the river. After leaving this the Missouri again spreads itself to its previous breadth of three hundred yards, though with more than its ordinary rapidity. . . .

June 14.—This morning one of the men was sent to Captain Clarke with an account of the discovery of the Falls; and, after employing the rest in preserving the meat which had been killed yesterday, Captain Lewis proceeded to examine the rapids above. From the Falls he directed his course southwest up the river. After passing one con-

tinued rapid and three cascades, each three or four feet high, he reached, at a distance of five miles, a second fall. The river is here about four hundred yards wide, and for the distance of three hundred rushes down to the depth of nineteen feet, and so irregularly that he gave it the name of the Crooked Falls. From the southern shore it extends obliquely upward about one hundred and fifty yards, and then forms an acute angle downward nearly to the commencement of four small islands close to the northern side. From the perpendicular pitch to these islands, a distance of more than one hundred yards, the water glides down a sloping rock with a velocity almost equal to that of its fall; above this fall the river bends suddenly to the northward.

While viewing this place, Captain Lewis heard a loud roar above him, and, crossing the point of a hill a few hundred yards, he saw one of the most beautiful objects in nature: the whole Missouri is suddenly stopped by one shelving rock, which, without a single niche, and with an edge as straight and regular as if formed by art, stretches itself from one side of the river to the other for at least a quarter of a mile. Over this it precipitates itself in an even, uninterrupted sheet, to the perpendicular depth of fifty feet, whence, dashing against the rocky bottom, it rushes rapidly down, leaving behind it a sheet of purest foam across the river. The scene which it presented was indeed singularly beautiful; since, without any of the wild, irregular sublimity of the lower falls, it combined all the regular elegancies which the fancy of a painter would select to form a beautiful waterfall.

The eye had scarcely been regaled with this charming prospect, when, at the distance of half a mile, Captain Lewis observed another of a similar kind. To this he immediately hastened, and found a cascade stretching across

the whole river for a quarter of a mile, with a descent of fourteen feet, though the perpendicular pitch was only six feet. This, too, in any other neighborhood, would have been an object of great magnificence; but after what he had just seen, it became of secondary interest; his curiosity being, however, awakened, he determined to go on, even should night overtake him, to the head of the falls. He therefore pursued the southwest course of the river, which was one constant succession of rapids and small cascades, at every one of which the bluffs grew lower, or the bed of the river became more on a level with the plains. At the distance of two and a half miles he arrived at another cataract of twenty-six feet. The river is here six hundred yards wide, but the descent is not immediately perpendicular, though the river falls generally in a regular and smooth sheet; for about one-third of the descent a rock protrudes to a small distance, receives the water in its passage, and gives it a curve.

On the south side is a beautiful plain, a few feet above the level of the falls; on the north the country is more broken, and there is a hill not far from the river. Just below the falls is a little island in the middle of the river well covered with timber. Here, on a cottonwood-tree, an eagle had fixed her nest, and seemed the undisputed mistress of a spot to contest whose dominion neither man nor beast would venture across the gulfs that surround it, and which is further secured by the mist rising from the Falls. This solitary bird could not escape the observation of the Indians, who made the eagle's nest a part of their description of the Falls, and which now proves to be correct in almost every particular, except that they did not do justice to their height. Just above this is a cascade of about five feet, beyond which, as far as could be discerned, the velocity of the water seemed to abate.

Captain Lewis now ascended the hill which was behind him, and saw from its top a delightful plain, extending from the river to the base of the Snowy Mountains to the south and southwest. Along this wide, level country the Missouri pursued its winding course, filled with water to its smooth, grassy banks, while about four miles above it was joined by a large river flowing from the northwest, through a valley three miles in width, and distinguished by the timber which adorned its shores. The Missouri itself stretches to the south in one unruffled stream of water, as if unconscious of the roughness it must soon encounter, and bearing on its bosom vast flocks of geese, while numerous herds of buffaloes are feeding on the plains which surround it.

Captain Lewis then descended the hill, and directed his course towards the river, falling in from the west. He soon met a herd of at least a thousand buffaloes, and, being desirous of providing for supper, shot one of them. The animal immediately began to bleed, and Captain Lewis, who had forgotten to reload his rifle, was intently watching to see him fall, when he beheld a large brown bear which was stealing on him unperceived, and was already within twenty steps. In the first moment of surprise he lifted his rifle, but remembering instantly that it was not charged, and that he had no time to reload, he felt there was no safety but in flight. It was in the open, level plain; not a bush nor a tree within three hundred yards, the bank of the river sloping, and not more than three feet high, so that there was no possible mode of concealment.

Captain Lewis therefore thought of retreating with a quick walk, as fast as the bear advanced, towards the nearest tree; but as soon as he turned, the bear rushed open-mouthed and at full speed upon him. Captain Lewis ran

about eighty yards, but finding that the animal gained on him fast, it flashed on his mind that by getting into the water to such a depth that the bear would be obliged to attack him swimming, there was still some chance for his life; he therefore turned short, plunged into the river about waist-deep, and, facing about, presented the point of his spontoon. The bear arrived at the water's edge within twenty feet of him; but as soon as he put himself in this posture of defence he seemed frightened, and, wheeling about, retreated with as much precipitation as he had advanced.

Very glad to be released from his danger, Captain Lewis returned to the shore, and observed him run with great speed, sometimes looking back, as if he expected to be pursued, till he reached the woods. He could not conceive the cause of the sudden alarm of the bear, but congratulated himself on his escape, when he saw his own track torn to pieces by the furious animal; and he learned from the whole adventure never to suffer his rifle to be for a moment unloaded.

HUNTING SCENES IN THE CANADIAN WOODS.

B. A. WATSON.

[As the literature of travel necessarily includes the deeds of the hunter in the haunts of wild animals, we have included among our selections a number of hunting scenes in different countries. The following incidents from a hunter's experience are from a popular work of sporting life, Watson's "The Sportsman's Paradise, or the Lake Land of Canada." The following is an exciting story of a deer-hunt on a Canadian lake.]

THE forenoon of the next day, October 7, was spent in trout-fishing, grouse-shooting, and exploring the surround-

ing country. The captain conducted me about half a mile up the side of a steep hill, which had its base on Long Lake, to another lake situated at the top of this hill or mountain. While I recognize the fact that all mountain lakes occupy different planes or levels, some higher and some lower, still it seemed very unusual to climb the face of a steep hill, commencing at one lake, and find another just where you had expected to reach the hill-top. This lake was nearly round, and probably somewhat less than one-half mile in diameter. We saw during our morning peregrinations many old moose-tracks, and also many spots in the woods where these animals had browsed; while a few of these moose indications were certainly of recent origin.

The captain thought it wise to tarry in our present camp several days, to kill deer and dry the venison, in order that we might have a supply of meat while engaged in moose-hunting, independent of that which we might be able to kill during this period.

We had unanimously agreed that it was inexpedient to take dogs with us on the moose-chase. In this particular our experience fully confirmed the wisdom of our conclusion. The moose cannot be driven to water by deer-hounds, or any other species of dog with which I am familiar; and, therefore, had we taken these animals with us, they could only have served to announce our presence to the game which we sought, without being able to render any assistance. These facts will become more apparent to the reader when he has read other portions of this book, where the story of the moose-hunt has been told from beginning to end. We are now entering on Nature's grandest preserve,—we find here the "King of the Canadian Forest," alias moose, deer, beaver, black bear, black wolf, speckled and lake trout, duck, ruffled grouse, etc. Here is

abundance of sport for the true sportsman. During the morning stroll we saw several beaver-houses which were occupied, and examined a large amount of their fresh work. These sights were highly interesting to me, but inasmuch as they have been so frequently described by others I shall omit them here.

It was already after twelve o'clock when we reached our camp. The guides prepared our dinner, which was speedily partaken of, and then we got off on a deer-hunt. The captain started into the woods with the dogs. George Ross and I entered a canoe, the former paddling across the lake to a point that commanded a view of a large portion of this water. We then stepped on dry land, and there patiently awaited the coming developments. We carefully scanned every visible portion of the lake. An hour passed and still we were watching; soon a grand splash was heard near the shore on the opposite side of the lake; the guide caught sight of the water which was thrown high into the air, but the head of the deer was scarcely visible to him while the animal was swimming towards us. The deer, which at first swam directly towards us, soon changed his course, and headed towards the foot of the lake. This change brought him plainly into view. A few minutes later the dog was seen running from the woods where the deer broke cover. The head and antlers of our game were visible above the waters of the lake, while he was swimming majestically without fear or even anxiety. We stood nearly half an hour watching the movements of this deer, since we could not safely move lest we should be discovered by the game and give him an opportunity to return to his forest home.

The reader should remember that this animal took to the water from the shore nearly opposite to the point on which we were standing, that the deer swam almost directly

towards us until he reached the middle of the stream, then turned downward, which gave us, in due time, an opportunity to come in unperceived behind him. Patiently we awaited this opportune moment. When it arrived the canoe, which had been drawn up on the shore near us, was quietly shoved out upon the water. Ross gently stepped to the stern with his paddle in hand, steadied our little bark while I entered its bow, where I seated myself and placed my rifle by my right side. Ross carefully pushed the little craft from its moorings, placed himself on his knees in that part of the canoe which properly trimmed it, and silently plied his paddle.

The little canoe moved noiselessly but rapidly forward, every stroke of the paddle bringing us nearer to the game. There was another paddle lying near my hand; I seized it and gave a helping hand, greatly increasing the speed. Forward, forward we went! We were unperceived, although within ten rods of a beautiful buck, which was swimming in the middle of the lake directly before us. My paddle was changed for my rifle. Nearer, still nearer we approached. The rifle was raised; the bead was drawn, just below the base of the animal's skull. We were six rods distant from the deer. A little puff of white smoke covered the bow of our boat; the crack of the rifle was heard, and the lifeless body of the deer floated on the water, which was slightly tinged with blood.

Thus ended this chase. The carcass was towed to shore in front of our camp, and the captain met us there, having returned from the woods, where he had gone to start the dogs. The dog which followed the buck I had just shot was also now in our camp, but the other was still absent.

Nearly two hours had elapsed since the buck was shot. There were now on the shore, in front of our camp, the cap-

tain, George Ross, and myself, while Mildenberger had gone back into the forest in search of ruffled grouse. Suddenly the captain sprang from the rock on which he had been seated, placed his right hand on his forehead in such a position as to shade his eyes, while he leaned slightly forward and gazed steadily out over the surface of the lake a few seconds without uttering a single word. This position was one I had frequently seen him assume. I therefore recognized the fact that he had sighted game, or was at least swayed by this thought, and now endeavored to solve the question.

Thus he had stood for a few seconds, when he simply exclaimed, "*A deer in the lake!*" and instantly sprang forward to the canoe. I had followed him closely with rifle in hand, expecting to make the chase with him; he quickly pushed the frail bark into the water and hastily said, "Doctor, let George go with me in the canoe; it will be a hard chase; we will drive the deer to you."

A few seconds later the canoe was in the water, the captain in the bow, and George Ross in the stern, each on their knees with a paddle in their hands. The little birch bark was rushing rapidly forward, propelled by the power of four strong muscular arms. The sight was a grand one, and called to mind the impetuous charge of a squadron of cavalry in war times. The captain is most determined and energetic when in the pursuit of game; like the grandest charger in the squadron, he is bound to take the lead, while the others can only follow.

I had seated myself on a rock, soon after the departure of the guides, to watch the deer, whose head was visible to me in my position, although fully a mile away. I could not, however, at so great a distance determine whether the animal possessed antlers or not; but the leisurely manner in which it was swimming satisfied me its pursuers were

undiscovered until they had made at least three-fourths of the whole distance. The animal, when first discovered, was nearly opposite to our camp and within a few rods of the farther shore. The guides, in order to succeed in the accomplishment of their purpose, were compelled to make a considerable detour to the rear of the animal, and finally come up between it and the shore. Fortunately for us, they had remained for a considerable time undiscovered, and the animal, in the mean time, was gradually leaving the shore while swimming down the lake.

The moment came, however, when the pursuers were discovered, and the deer then made the most frantic efforts. I could see it spring forward with all its power, raising its head high in the air with each grand effort, but the guides are pulling stronger than before on their paddles. They seem, when viewed from my position, to be only a few rods in the rear of the animal, but the deer is heading for the shore, and seems about ready to bound into the forest. It is now evident to me that the chase can only last a few seconds.

I sprang from my seat; I recalled the fact that the guides had no gun in the boat; I realized that if they had one they could now easily kill the animal; they were almost on it. *An instant later and the canoe is seen between the deer and the shore.* A loud shout is heard from the guides; they wave their hats; they are victorious, and the disappointed deer now turns and swims towards the middle of the lake. Its grandest effort has been made; fatigue and disappointment slow down its movements.

It was now an easy task for the guides to direct the animal to any point on the lake. The canoe was kept in the rear, and when it was brought forward towards the right of the deer it would cause the animal to oblique to the left, and *vice versa.* In this manner they proceeded to cross the

lake, bringing the doe in front of the rock on which I was seated; but while she was still about six hundred yards away they called on me to take a shot. I demurred against their request, inasmuch as the portion of the animal now visible did not much exceed the dimensions of a pint cup. The first ball fired fell short about fifty yards, and then ricochetted nearly across the lake. Another shot was fired with no better result, and thus I continued for several minutes, but not without making some improvement. The shots were pronounced by the guides to be accurate, so far as the line of the target was concerned, but the balls still fell short of the mark.

The photographer, who was absent in the woods when I commenced firing, now made his appearance, and, seizing the Winchester rifle, began to compete with me. He was able to fire two shots with the repeater while I could fire one from the breech-loading Ballard. The contest between us was now very lively, and we succeeded in persuading the guides to bring the game nearer to us, so that the animal was not more than one hundred yards from the muzzles of our rifles. The bullets now fell in very close proxity to the doe's head; none were more than four or five inches from its centre. Six or eight shots have been fired with this degree of accuracy, when I send in one that breaks the skin over the base of the animal's skull. She dodges her head downward, but quickly brings it up again, when a shot from Mildenberger ends this trial of skill. The guides shout aloud and lustily cheer the photographer, who proudly puts down his rifle and wipes the perspiration from his brow.

[The author proceeds to give a series of interesting accounts of moose-hunts, somewhat too extended for the space we can give him. We shall therefore close with an amusing incident, in which "Jim," one of the guides, and his dog were the acting characters.]

The clouds have begun to disappear, the bright rays of sunshine are now lighting up our pathway, while the gentle zephyrs are moving the foliage of the forest-trees. The prospects of a fine day's sport are brightening at this moment. "Jim" exclaims, "We will have a good day of it yet!" while at the same time a partridge rises at the roadside, an event which is announced to us by the barking of the cocker-spaniel. This dog had taken his position at the foot of a small tree, the branches of which even overhung the roadway, and here continued to bark lustily, thus keeping the attention of the bird until the lad sent up his compliments, which she promptly acknowledged by tumbling to the ground.

The killing of this bird gave rise to a highly ludicrous scene, which I fully appreciated at the time, and which I can never readily forget. Jim had previously told me that the old cocker-spaniel had a very bad habit, and would "mouth" the birds whenever he could get hold of them, while he entirely disregarded the order to "bring dead bird." The owner of this dog had, likewise, informed me that the animal had never received any training, but naturally hunted very well, and was a good "treer." The instant the lad fired at this bird, Jim sprang into the woods with the alacrity of a hound, in order to grab the falling partridge before the old cocker could get hold of him.

The cocker, however, succeeded in getting the best of Jim, grabbed the bird in his mouth, and started off at full speed, while the guide followed him on the jump, as a fox-hound might follow a hare, shouting, with every bound, "Stop! stop! drop it! drop it!" until the woods became fairly resonant with these sounds. A few seconds later the dog emerged from the woods, still clinging to the bird, closely followed by the irate guide, who still yelled as though his life depended on this effort.

Here the old dog made the fatal mistake which finally cost him the prize he had attempted to steal. He started down the road as rapidly as he could run, but Jim steadily gained ground on him. Jim was wearing on this occasion a pair of heavy leather brogans, which contained in the soles about fifty steel spikes. These shoes, in fact, were procured by him while he was engaged in that occupation commonly designated as "river-driving," and these spikes were intended to nail him firmly to the floating logs, and thus prevent accident or injury from slipping. The road on which this race between the old cocker and our guide took place was nearly a mass of rocks, generally flat on the upper surface, which formed the road-bed, although they possessed many irregularities of surface, size, etc. The moment the guide and dog emerged from the woods and started off on this road, they were in full view of both my son and myself. The sparks eliminated by the contact of the spikes in Jim's brogans with the rocks in his pathway lighted up his trail, and added greatly to the ludicrousness of the scene. The race may be fairly said to have been nip and tuck, but the guide was slowly gaining on the cocker.

They had run about ten rods when Jim's brogans were in close proximity to the old dog's tail. It seemed highly probable at this moment that the guide's spiked shoes would be used as a petard for the destruction of the fugitive thief; but no, he has determined to capture him alive.

Behold them at this moment! Jim has dropped, with the intention of seizing the old rascal with his hands. The old dog—as if anticipating this movement—has suddenly jumped to one side, and instantly turned to retrace his steps. Jim struck the ground with a heavy thud, but was neither killed nor severely injured by this manœuvre. The dog, however, in the mean time, had been rapidly gaining on the guide, and was well started on the homeward

stretch. He occasionally turned his head, in order to catch a glimpse of his pursuer, but he did not halt, nor even slacken his pace.

Jim was soon on his feet again, but not until the dog had secured a good start. The guide was maddened by failure, and resumed the race with a fierce determination to win. Every second shortened the distance between the contestants when Jim had fairly succeeded in getting under way. The old dog seemed to fully comprehend the gravity of the situation, and occasionally turned his head for the purpose of discovering and estimating his danger. He had passed safely one-half of the home-stretch, but was at this moment compelled to drop the bird from his mouth. Jim was at this moment close upon the dog's heels, but he heeded not the dead bird, and was evidently determined to punish the thief. The old cocker showed at this time unmistakable signs of exhaustion and fear, and was unquestionably repentant. Jim's brogans were once more at the dog's caudal extremity, when he suddenly dodged aside and endeavored to reach the cover of the woods; but he was too completely exhausted to accomplish this object. He dropped to the ground and looked imploringly into Jim's eyes for mercy; but Jim heeded not the imploring looks and cringing attitude of the old rascal. He had him by the nape of the neck, and promptly administered the well-merited punishment. The old dog fairly yelled with pain, and Jim yelled back to him, "Steal the boy's bird, will you? I will teach you honesty! I will, you old rascal!"

The whole scene had been watched by the boy and myself. The comical part played by the actors can be more easily imagined than described. It caused peal after peal of laughter from the boy and myself. The boy finally dropped down upon the ground before the race ended, having been so convulsed with laughter as to be unable to

stand erect, while I only remained standing until the race ended, and then followed my son's example. Jim having administered the necessary chastisement to the dog, likewise sought rest on the bosom of mother-earth, while the old cocker, after having sulked a few moments in the woods, came sneakingly out and cautiously approached the contestant in the race, licked affectionately his hand, and then looked imploringly up into his eyes. The dog having thus humbly acknowledged the justice of the punishment which had been inflicted on him, was then freely forgiven by Jim, who patted him affectionately on the head and back.

Thus there was perfect harmony between the guide and the spaniel. The dog immediately reclined at Jim's side, placed his head affectionately on his master, having assumed a position which enabled him to look wistfully into the latter's face. Our little mongrel dog had not remained entirely inactive during these exciting events. In the race he participated, though falling far behind both actors; nevertheless he barked and wagged his tail continuously, thus showing the joy and interest which he felt in this part of the proceedings, although when the chastisement commenced he drew his tail between his legs, suddenly disappeared in the woods, and only reappeared after the lapse of an hour.

[Shortly after they started again the boy brought down another bird, whose presence had been announced by the cocker-spaniel.]

The old dog made no attempt on this occasion to secure the bird when it fell to the ground, but, on the contrary, did not move from the spot where he was standing, and allowed the guide to approach quietly the dead bird and to pocket the same. In fact, it may be stated that we had no further trouble with this dog during the remainder of the

hunt. He had previously shown much affection for Jim; but after the chase and the chastisement which he received he was certainly doubly affectionate towards his master. He had always hunted faithfully for us, but during the balance of the day he seemed to be more than usually active, and found many birds by the roadside.

THE GRAND FALLS OF LABRADOR.

HENRY G. BRYANT.

[The discovery of America has not yet been completed. Certainly that of its Canadian section has not been. There are wide districts of that great area on which human foot has never been set, and as late as 1895 we were advised of the discovery of a great river, with its head-waters near those of the Ottawa, but previously unsuspected. Labrador has been but little traversed, and the Grand Falls had only been seen by two white men previously to Mr. Bryant's visit in the summer of 1891. What we know of it, and of the course of the Grand, or Hamilton River, we owe chiefly to him, since the only earlier account is the imperfect one given by John McLean, describing his visit in 1839. The enterprise was not an easy one, as will appear from the description of the hardships of the journey. The party consisted of Mr. Bryant, of Philadelphia, Professor Kenaston, of Washington, John Montague, a young Scotchman, and Geoffrey Ban, an Eskimo, the last two hailing from Labrador. These four had to drag a heavy boat against a swift current for many miles up the stream, in the manner described below.]

THE usual method employed was what is technically known as "tracking." That is, a strong rope, about the thickness of a clothes-line, was tied to the gunwale of the boat just aft of the bow. To the shore end of this broad leather straps were attached. With these across their shoulders, three of the party tugged away along the rocky bank, while number four of our crew, with an oar lashed

in the stern, steered a devious course among the rocks and shallows of the river. The "tow-path" in this instance was of the roughest and most diversified character. Sandy terraces and extended reaches covered with glacial boulders characterized the lower portion of the river, while farther up-stream great numbers of smaller boulders, insecurely lodged on the precipitous sandy banks, would baffle us by the precarious footing they afforded. Where a combination of this "rubble" and a troublesome rapid occurred, it was only by the most violent exertion and no end of slipping and sliding that the tension of the tow-line could be maintained on the treacherous ground. Then, again, stretches of steep rocky bank, where no tracking was possible, would often compel us to scale the rugged cliffs and pass the line from one to another over various obstacles. Wading through the water was frequently the only resource. This was always the case when we reached a place in the river where the spring freshets had undermined the banks, and where numbers of trees, stumps, and underbrush littered the shore, forming *chevaux-de-frise* of the most formidable character.

The long daylight of midsummer in this subarctic region was a point in our favor, enabling us to work to the limit of our strength. Here, indeed, we found that "Night and day hold each other's hands upon the hill-tops. . . . No sooner does the sun set north by west, than, like a giant refreshed, it rises again north by east."

[At times they had to drag the boat up rapids, at times to unload and transport it and its contents around falls by difficult portages. Through much of the course the stream ran at about eight miles an hour, but many rapids added to this speed.]

Judged by ordinary standards of travel, our advance up the river was slow indeed; but to those who are familiar

with canoe transportation on Canadian rivers, I am sure our progress will appear respectable, when the unwieldy character of our boat is taken into consideration. There seems to be something positively personal and vindictive in the resistance which rapids make to a traveller's advance into a wild and mountainous country. There was, accordingly, a cumulative feeling of satisfaction as one after another of these barriers of nature's making were surmounted. In the swollen condition of the river, the struggle with these wild rapids was often as savage and exhilarating as one could desire. John and myself usually took the lead on the tow-line, Geoffrey busying himself with keeping the line clear of snags, while to Professor Kenaston was assigned the steersman's part. Bending to their work, the linemen would clamber along the bank, dragging the slowly yielding mass up-stream. Ofttimes the force of the current would carry out the boat far into mid-stream, until the full length of line would be exhausted. We could do nothing then but hang on like grim death and watch our craft toss and roll amid the billows, until, like a spirited horse, gradually yielding to the strain, she would turn her head shoreward. Professor Kenaston, meanwhile, with tense muscles, bending to the steering-oar, skilfully guided his charge amid the encompassing rocks and eddies,—the only quiet figure on the surging flood of the river. . . .

Looking back on these days spent along the river, I recall how each one was filled with incident and how all were stimulated by the uncertainty of what lay before us. It is the experience of many that, in recalling travels of this kind, the pleasant features of the time are remembered with more distinctness than the trying ones. So in the retrospect of this journey, many of the incidents, unpleasant at the time, are softened by time's perspective, while

the bright ones stand out in bolder relief and recur to the memory with pleasure. One awkward adventure, however, which occurred on the first day on the Mouni Rapids, I have not yet succeeded in relegating to the realm of forgetfulness. We were approaching a rocky point, similar to many others we had encountered, past which the water dashed with angry violence. It was our custom, on reaching such a place, to first detach the canoe, and then to shove out the boat obliquely from the still water, to allow her bow to fairly meet the swifter current. On this occasion, while Montague and I, facing up-stream, were waiting on the bank above for the signal to advance, the boat, through some carelessness, was pushed out from the quiet eddy squarely into the swift water. The full force of the torrent struck her abeam, and away she swept down-stream like a thing possessed. Taken unawares, no time was given to throw off the leather straps from our shoulders, and instantly we were thrown from our feet and dragged over the rocks into the river by the merciless strength of the flood. Most fortunately for me, the circular strap slipped over my head as I was being dragged through the water. Montague's also released itself, and the runaway sped down-stream a quarter of a mile before stopping. On clambering up the bank I found Montague stunned and bleeding from a scalp wound. Aside from some abrasions of the skin, I was none the worse for the shaking up, and after a brief delay Montague revived, and we resumed our "tow-path" exercise.

[The climate did not prove as severe as was expected, the temperature being just low enough to be exhilarating and bracing. Game and fish were abundant, and two black bears were killed by the party.]

The declining sun of August 20 beheld our small craft glide into the smooth waters of Lake Wanakopow. The

first view of the lake was beautiful, and most grateful to our eyes after the long struggle with the rapids. Even Geoffrey and John, usually indifferent to scenic effects, could not conceal their admiration as we glided by towering cliffs and wooded headlands, and beheld at intervals cascades leaping from the rocks into the lake, their silvery outlines glistening in the sun and contrasting distinctly with the environment of dark evergreen foliage. This romantic sheet of water stretches in a northeasterly and southwesterly direction a distance of about thirty-five miles, and has an elevation above sea-level, according to my aneroid observations, of four hundred and sixty-two feet. Low mountains of granite and gneiss rise on both sides, and the average width of the lake is less than one mile. A sounding taken near the middle showed a depth of four hundred and six feet. This narrow elevated basin is probably of glacial origin, the presence of great numbers of boulders and the rounded appearance of the hill summits pointing to a period of ice movement.

[They finally reached a point beyond the previously stated location of the falls, and on August 27 attained the head of boat navigation in a wide, shallow rapid.]

While at the Northwest River Post we had learned from a reliable Indian that the old trail, long disused, led from this point on the river to a chain of lakes on the table-land. By following these lakes and crossing the intervening "carries," the rapid water which extends for fifteen miles below the Falls could be circumvented, and the traveller brought finally to the waters of the Grand River, many miles above the Grand Falls. Our plan was to follow this old trail for several days, and then to leave the canoe and strike across country in a direction which we hoped would bring us again to the river in the vicinity of the Falls.

It was deemed best to follow this circuitous canoe route rather than to attempt to follow the banks of the river on foot, in which case everything would have to be carried on our backs through dense forests for many miles.

After a long search the old trail was found, and, leaving Geoffrey in charge of the main camp on the river, the other members of the party took the canoe and a week's provisions, and began the ascent of the steep path which led up to the edge of the elevated plateau, which here approaches the river. Making a "carry" of three miles to the north along the old trail, we reached the first of the chain of lakes, where we erected a rude shelter and camped for the night. A violent storm arose during the night, and next day we lost much time in seeking for the continuation of the trail on the opposite side of the lake. Having been disused for twenty-seven years, the path, where it came out on the lake-shore, was distinguished by no "blazes" on the trees, or recent choppings. This necessitated a careful examination of the shores on all the lakes, and caused considerable delay.

We were now on the great table-land of the Labrador interior, and, wishing to get a good outlook, climbed a conspicuous hill near by to scan the adjacent country. A view truly strange and impressive was before us. As far as the eye could reach extended an undulating country, sparsely covered with stunted spruce-trees, among which great weather-worn rocks gleamed, while on all sides white patches of caribou moss gave a snowy effect to the scene. A hundred shallow lakes reflected the fleeting clouds above, their banks lined with boulders, and presenting a labyrinth of channels and island passages. Low hills arose at intervals among the bogs and lakes, but the general effect of the landscape was that of flatness and bleak monotony.

The continuation of the old Nascopie trail remaining invisible, to escape the discomfort of another rainy night on the plateau we returned to the shelter of the camp on the river. On August 30 we returned to Geoffrey Lake, where our patient search for the trail was at last successful.

Next day we advanced along the trail, which led us over four "carries" and across five lakes. For convenience of reference, we applied names to some of these small sheets of water. Thus, the third one of the chain was designated "Gentian Lake," from finding the closed variety of the blue gentian growing on its borders. The next day we turned aside from the dim trail and paddled to the northwestern extremity of the sixth lake, where we drew the canoe ashore and prepared for the tramp across country. Arrayed in heavy marching order, and carrying nearly all that remained of our provisions, we were soon advancing westward on a course which we hoped would soon bring us to the river in the vicinity of the Falls. The country we were now passing through was of the most desolate character, denuded of trees and the surface covered with caribou moss, Labrador tea plants, blueberry-bushes, and thousands of boulders. By keeping to the ridges fair progress was made; but when compelled to leave the higher ground and skirt the borders of the lakes, dense thickets of alders and willows were encountered, and these greatly impeded our advance. Language seems inadequate to describe the desolation of this upland landscape. No living thing was encountered, and the silence of primordial time reigned supreme.

Just before sunset we went into camp on a hill-side near a large lake, and soon after, from the top of a high rock, beheld a great column of mist rising like smoke against the western sky. This we knew marked the position of

the Falls, and, needless to say, our spirits rose—oblivious of our bleak surroundings—as we contemplated the near attainment of our journey's end. During the night the thermometer registered a minimum temperature of forty-one degrees, and we were treated to a superb display of Northern Lights.

September 2 was a day memorable as marking the date of our arrival at the Grand Falls. A rough march over the rocks and bogs intervened, however, before we reached this goal. As we approached the river, spruce-forests of a heavier growth appeared, and, pressing on through these, although we could no longer see the overhanging mist, the deep roar of falling waters was borne to our ears with growing distinctness. After what seemed an intolerable length of time—so great was our eagerness—a space of light in the trees ahead made known the presence of the river. Quickening our steps, we pushed on, and with beating hearts emerged from the forest near the spot where the river plunged into the chasm with a deafening roar.

A single glance showed us that we had before us one of the greatest waterfalls in the world. Standing at the rocky brink of the chasm, a wild and tumultuous scene lay before us, a scene possessing elements of sublimity and with details not to be apprehended in the first moments of wondering contemplation. Far up-stream one beheld the surging, fleecy waters and tempestuous billows, dashing high their crests of foam, all forced onward with resistless power towards the steep rock whence they took their wild leap into the deep pool below. Turning to the very brink and looking over, we gazed into a world of mists and mighty reverberations. Here the exquisite colors of the rainbow fascinated the eye, and majestic sounds of falling waters continued the pæan of the ages. Below and beyond the seething caldron the river appeared, pursuing its turbulent

career, past frowning cliffs and over miles of rapids, where it heard "no sound save its own dashings." The babel of waters made conversation a matter of difficulty, and after a mute exchange of congratulations, we turned our attention to examining the river in detail above and below the Falls.

A mile above the main leap the river is a noble stream four hundred yards wide, already flowing at an accelerated speed. Four rapids, marking successive depressions in the river-bed, intervene between this point and the Falls. At the first rapid the width of the stream is not more than one hundred and seventy-five yards, and from thence rapidly contracts until reaching a point above the escarpment proper, where the entire column of fleecy water is compressed within rocky banks not more than fifty yards apart.

Here the effect of resistless power is extremely fine. The maddened waters, sweeping downward with terrific force, rise in great surging billows high above the encompassing banks ere they finally hurl themselves into the gulf below. A great pillar of mist rises from the spot, and numerous rainbows span the watery abyss, constantly forming and disappearing amid the clouds of spray. An immense volume of water precipitates itself over the rocky ledge, and under favorable conditions the roar of the cataract can be heard for twenty miles. Below the Falls, the river, turning to the southeast, pursues its maddened career for twenty-five miles shut in by vertical cliffs of gneissic rock, which rises in places to a height of four hundred feet. The rocky banks above and below the Falls are thickly wooded with firs and spruces, among which the graceful form of the white birch appears in places.

[The Falls were photographed from several points of view, and carefully measured, the vertical descent proving to be over three hundred feet, while the chute or rapid at their head made a farther descent of thirty-two feet.]

The deep, incessant roar of the cataract that night was our lullaby as, stretched out under a rough "barricade," we glided into that realm of forgetfulness where even surroundings strange as ours counted as naught.

By the morning light we again viewed the wonders of the place, and sought for some sign of the presence of bird or animal in the vicinity; but not a track or the glint of a bird's wing rewarded our quest, and this avoidance of the place by the wild creatures of the forest seemed to add a new element of severity to the eternal loneliness of the spot.

The Grand Falls of Labrador, with their grim environment of time-worn, archaic rocks, are one of the scenic wonders of this Western world, and if nearer civilization, would be visited by thousands of travellers every year. They are nearly twice as high as Niagara, and are only inferior to that marvellous cataract in breadth and volume of water. One of their most striking characteristics is the astonishing leap into space which the torrent makes in discharging itself over its rocky barrier. From the description given of the rapid drop in the river-bed and concident narrowing of the channel, one can easily understand that the cumulative energy expended in this final leap of the pent-up waters is truly titanic.

If a substratum of softer rock existed here, as at Niagara, a similar "Cave of the Winds" would enable one to penetrate a considerable distance beneath the fall. The uniform structure of the rock, however, prevents any unequal disintegration, and thus the overarching sheet of water covers a nearly perpendicular wall, the base of which is washed by the waters of the lower river. In spite of the fact that no creature, except one with wings, could hope to penetrate this subaqueous chamber, the place is inhabited, if we are to believe the traditions of the Lab-

rador Indians. Many years ago, so runs the tale, two Indian maidens, gathering firewood near the Falls, were enticed to the brink and drawn over by the evil spirit of the place. During the long years since then, these unfortunates have been condemned to dwell beneath the fall and forced to toil daily dressing deer-skins; until now, no longer young and beautiful, they can be seen betimes through the mist, trailing their white hair behind them and stretching out shrivelled arms towards any mortal who ventures to visit the confines of their mystic dwelling-place.

The Indian name for the Grand Falls—Pat-ses-che-wan—means "The Narrow Place where the Water Falls." Like the native word Niagara,—"Thunder of Waters,"—this Indian designation contains a poetic and descriptive quality which it would be hard to improve.

From the point where the river leaves the plateau and plunges into the deep pool below the Falls, its course for fifteen miles is through one of the most remarkable cañons in the world. From the appearance of the sides of this gorge, and the zigzag line of the river, the indications are that the stream has slowly forced its way through this rocky chasm, cutting its way back, foot by foot, from the edge of the plateau to the present position of the Falls. Recent investigators estimate that a period of six thousand years was required to form the gorge below Niagara Falls; or, in other words, that it has taken that time for the Falls to recede from their former position at Queenstown Heights to their present location. If it has taken this length of time for the Niagara Falls to make their way back a distance of seven miles by the erosive power of the water acting on a soft shale rock supporting a stratum of limestone, the immensity of time involved by assuming that the Grand River cañon was formed in the same way is so

great that the mind falters in contemplating it, especially when it is recognized that the escarpment of the Labrador Falls is of hard gneissic rock. And yet no other explanation of the origin of this gorge is acceptable, unless, indeed, we can assume that at some former time a fissure occurred in the earth's crust as a result of igneous agencies, and that this fissure ran in a line identical with the present course of the river; in which case the drainage of the table-land, collecting into the Grand River, would follow the line of least resistance, and in the course of time excavate the fissure into the present proportions of the gorge.

LIFE AMONG THE ESQUIMAUX.

WILLIAM EDWARD PARRY.

[The attempt to find a northwest passage from the Atlantic to the Pacific, by which commerce might make its way round the continent of North America, occupied the attention of navigators from the voyage of Henry Hudson, in 1610, to that of McClure, in 1850; the latter proving that such a passage existed, but that it was impracticable for commerce. Among those engaged in this enterprise one of the most notable was Captain Parry, from whose interesting journal of his voyage (1821–25) the following selection is taken, descriptive of experiences at Gore Bay, where the ships of the expedition had lain all winter in the ice.]

ON the 2d of April a thin sheet of bay-ice several miles square had formed on the sea to the eastward and southward, where for two or three days past there had been a space of open water. This was occasioned more by the wind remaining very moderate and the neap tides occurring about this time than from any great degree of cold, the thermometer seldom falling below —6° or —7°. The

wind, however, settling in the southeast to-day, the main body of ice, which had been scarcely visible in the offing, soon began to move inshore, forcing before it the young floe and squeezing it up into innumerable hummocks, which presently, being cemented together by a fresh formation in their interstices, constituted an example of one of the ways in which these "hummocky floes" are produced, of which I have before so often had occasion to speak. We were always glad to see this squeezing process take place while the ice was still thin enough to admit of it, as it thus became compressed perhaps into one-fiftieth part of the compass that it would otherwise have occupied, and of course left so much the more open space upon the surface of the sea. The temperature of the water at the bottom in eight fathoms was to-day 28°, being the same as that of the surface.

Early in the morning the Esquimaux had been observed in motion at the huts, and several sledges drawn by dogs and heavily laden went off to the westward. On going out to the village, we found one-half of the people had quitted their late habitations, taking with them every article of their property, and had gone over the ice, we knew not where, in quest of more abundant food. The wretched appearance which the interior of the huts now presented baffles all description. In each of the larger ones some of the apartments were either wholly or in part deserted, the very snow which composed the beds and fireplaces having been turned up, so that no article might be left behind. Even the bare walls, whose original color was scarcely perceptible for black, blood, and other filth, were not left perfect, large holes having been made in the sides and roofs for the convenience of handing out the goods and chattels. The sight of a deserted habitation is at all times calculated to excite in the mind a sensation of dreariness and desola-

tion, especially when we have lately seen it filled with cheerful inhabitants; but the feeling is even heightened rather than diminished when a small portion of these inhabitants remain behind to endure the wretchedness which such a scene exhibits. This was now the case at the village, where, though the remaining tenants of each hut had combined to occupy one of the apartments, a great part of the bed-places were still bare, with the wind and drift blowing in through the holes which they had not yet taken the trouble to stop up. The old man Hikkeeira and his wife occupied a hut by themselves, without any lamp or a single ounce of meat belonging to them, while three small skins, on which the former was lying, were all that they possessed in the way of blankets. Upon the whole, I never beheld a more miserable spectacle, and it seemed a charity to hope that a violent and constant cough with which the old man was afflicted would speedily combine with his age and infirmities to release him from his present sufferings. Yet in the midst of all this he was even cheerful, nor was there a gloomy countenance to be seen at the village.

Almost all the men were out, and some of them had been led so far to sea upon the floating and detached masses of ice in pursuit of walruses that Captain Lyon, who observed their situation from the ships, had it in contemplation, in the course of the evening, to launch one of the small boats to go to their assistance. They seemed, however, to entertain no apprehension themselves, from confidence, perhaps, that the southeast wind might be depended upon for keeping the ice close home upon the shore. It is certain, notwithstanding, that no degree of precaution, nor any knowledge of the winds and tides, can render this otherwise than a most perilous mode of obtaining subsistence; and it was impossible, therefore, not to admire the fearlessness as well

as dexterity with which the Esquimaux invariably pursued it.

Having distributed some bread-dust among the women, we told old Illumea and her daughter Togolat that we proposed taking up our lodging in their hut for the night. It is a remarkable trait in the character of these people that they all always thank you heartily for this as well as for eating any of their meat, but both board and lodging may be given to *them* without receiving the slightest acknowledgment either in word or deed. As it was late before the men returned, I asked Togolat to get the rest of the women to perform some of their games, with the hope of seeing something that was new. I had scarcely time to make the proposal when she darted out of the hut and quickly brought every female that was left at the village, not excepting even the oldest of them, who joined in the performance with the same alacrity as the rest. I could, however, only persuade them to go through a tedious song we had often before heard, which was now indeed somewhat modified by their insisting on our taking turns in the performance, all which did not fail to create among them never-ceasing merriment and laughter. Neither their want of food and fuel, nor the uncertain prospect of obtaining any that night, were sufficient to deprive these poor creatures of that cheerfulness and good humor which it seems at all times their peculiar happiness to enjoy.

The night proved very thick with small snow, and as disagreeable and dangerous for people adrift upon floating ice as can well be imagined. If the women, however, gave their husbands a thought or spoke of them to us, it was only to express a very sincere hope that some good news might shortly arrive of their success. Our singing party had not long been broken up when it was suddenly announced by one of the children, the usual heralds on such

occasions, that the men had killed something on the ice. The only two men who were at home instantly scrambled on their outer jackets, harnessed their dogs, and set off to assist their companions in bringing home the game, while the women remained for an hour in anxious suspense as to the extent of their husbands' success. At length one of the men arrived with the positive intelligence of two walruses having been taken, and brought with him a portion of these huge animals as large as he could drag over the snow.

If the women were only cheerful before, they were now absolutely frantic. A general shout of joy instantly re-echoed through the village; they ran into each other's huts to communicate the welcome intelligence, and actually hugged one another in an ecstasy of delight by way of congratulation. One of them, Arnalooă, a pretty young woman of nineteen or twenty, knowing that a dog belonging to her husband was still at the huts, and that there was no man to take him down on the ice, ran out instantly to perform that office; and, with a hardiness not to be surpassed by any of the men, returned after two hours' absence, with her load of walrus-flesh, and without even the hood thrown over her head to protect her from the inclemency of the weather.

When the first burst of joy had at length subsided, the women crept one by one into the apartment where the first portion of the sea-horses had been conveyed, and which is always that of one of the men immediately concerned in the killing of them. Here they obtained blubber enough to set all their lamps alight, besides a few scraps of meat for their children and themselves. From this time, which was nine o'clock, till past midnight fresh cargoes were continually arriving, the principal part being brought in by the dogs, and the rest by the men, who, tying the thong

which held it round their waist, dragged in each his separate portion. Before the whole was brought in, however, some of them went out three times to the scene of action, though the distance was a mile and a half.

Every lamp now swimming with oil, the huts exhibited a blaze of light, and never was there a scene of more joyous festivity than while the operation of cutting up the walruses continued. I took the opportunity which their present good humor afforded to obtain a perfect head and tusks of one of these animals, which we had not been able to do before; and indeed, so much were their hearts opened by the scene of abundance before them, that I believe they would have given us anything we asked for. This disposition was considerably increased, also, by their taking it into their heads that their success was in some way or other connected with, or even owing to, our having taken up our night's lodging at the huts.

After viewing all this festivity for some time, I felt disposed to rest, and wrapping myself up in my fur coat, lay down on one of the beds which Illumea had given up for our accommodation, as well as her *kēipik*, or large deer-skin blanket, which she had rolled up for my pillow. The poor old woman herself sat up by her lamp, and in that posture seemed perfectly well satisfied to doze away the night. The singularity of my night's lodging made me awake several times, when I always found some of the Esquimaux eating, though after we lay down they kept quiet for fear of disturbing us. Mr. Halse, who was still more wakeful, told me that some of them were incessantly employed in this manner for more than three hours. Indeed, the quantity of meat that they thus contrive to get rid of is almost beyond belief.

Having at length enjoyed a sound nap, I found on awaking about five o'clock that the men were already up,

and had gone out to resume their labors on the ice, so that several of them could not have rested more than two or three hours. This circumstance served to correct a notion we had entertained, that when once abundantly supplied with food they took no pains to obtain more till want began again to stare them in the face. It was now more pleasing to be assured that, even in the midst of plenty, they did not indolently give themselves up to repose, but were willing to take advantage of every favorable opportunity of increasing their store. It is certain, indeed, that were these people more provident (or, in other words, less gluttonous, for they do not waste much), they might never know what it is to want provisions, even during the most inclement part of the year. The state of the ice was to-day very unfavorable for their purpose, being broken into pieces so small that they could scarcely venture to walk upon it. . . .

The morning of the 5th proved favorable for a journey I had in contemplation to the distant huts, to which Iligliuk, who had come to Winter Island the day before, promised to be my guide. At six o'clock I set out, accompanied by Mr. Bushman and two of the men, carrying with us a supply of bread-dust, besides our own provisions and blankets. As the distance was too great for her son Sioutkuk to walk, we were uncertain till the moment of setting out how this was to be managed, there being no sledge at hand for the purpose. We found, however, that a man, whom we had observed for some time at work among the hummocks of ice upon the beach, had been employed in cutting out of that abundant material a neat and serviceable little sledge, hollowed like a bowl or tray out of a solid block, and smoothly rounded at the bottom. The thongs to which the dogs were attached were secured to a groove cut around its upper edge; and the young seal-

catcher, seated in this simple vehicle, was dragged along with great convenience and comfort.

The ice over which we travelled was a level floe that had never suffered disturbance since its first formation in the autumn, and with not more than an inch and a half of snow upon it. The path being distinctly marked out by the people, sledges, and dogs that had before travelled upon it, one might, without any great stretch of the imagination, have almost fancied it a road leading over a level and extensive heath towards a more civilized and substantial village than that which we were now approaching. Iligliuk walked as nimbly as the best of us; and after two hours and a half brisk travelling we arrived at the huts, and were received by the women (for all the men were absent) with every expression of kindness and welcome. Each was desirous of affording us lodging, and we had speedily arranged matters so as to put them to the least possible inconvenience.

These huts, four in number, were in the mode of their construction exact counterparts of those at Winter Island on our first visit, but, being now new and clean, presented a striking contrast with the latter, in their present disordered and filthy state. What gave a peculiarity, as well as beauty also, to the interior appearance of these habitations, was their being situated on the ice, which, being cleared of the snow, presented a flooring of that splendid blue which is, perhaps, one of the richest colors that nature affords. A seal or two having been lately procured, every lamp was now blazing, and every *ootkŏoseĕk* smoking with a hot mess which, together with the friendly reception we experienced and a little warmth and fatigue from travelling, combined in conveying to our minds an idea of comfort which we could scarcely believe an Esquimaux hut capable of exciting.

On the arrival of the men, who came in towards evening, with two seals as the reward of their labor, we were once more greeted and welcomed. Arnaneelia in particular, who was a quiet, obliging, and even amiable, man, was delighted to find that my quarters were to be in his apartment, where Aneetka, his wife, a young woman of about twenty-three, had already arranged everything for my accommodation; and both these poor people now vied with each other in their attention to my comfort. The other two apartments of the same hut were occupied by Kaoongut and Okotook, with their respective wives and families, it being the constant custom of these people thus to unite in family groups whenever the nature of their habitations will allow it. Mr. Bushman being established with Okotook, and the two men with Kaoongut, we were thus all comfortably lodged under the same roof. . . .

On the 22d a number of the Esquimaux came to the ships with a sledge, and among the rest my late host Arnaneelia and his wife, the latter having the front of her jacket adorned with numberless strings of beads that we had given her, arranged with exact uniformity, to which, in the fashion of their dresses and the disposition of their ornaments, these people always rigidly adhere. Aneetka had scarcely reached the cabin when she produced a little ivory comb and a pair of handsome mittens, which she presented to Mr. Edwards, at the same time thanking him for the attention he had shown her on an occasion when she had been taken in a fit alongside the "Fury," from which she was recovered by bleeding. This expression of gratitude, in which she was heartily joined by her husband, was extremely gratifying to us, as it served in some degree to redeem these people in our estimation from the imputation of ingratitude which is indeed one of their greatest failings.

They stated having seen two reindeer the preceding day going over the ice to the mainland. They spoke of this with great pleasure, and we were ourselves not displeased with the prospect of changing our diet for a little venison. They now became extremely urgent with us for wood to make bows and arrows, most of their own having, with the childishness that accompanied their first barterings, been parted with to our officers and men. Having several broken oars which could be turned to little or no account on board, we were enabled, at a small expense of useful stores, to furnish them very abundantly with wood for this purpose. Arnaneelia also informed us that Okotook, who had been unwell for some days, was now much worse, and seemed, as he described it, to be laboring under a violent pulmonary complaint. On the circumstance being mentioned to Mr. Skeoch, he kindly volunteered to go to the village, and accordingly took his seat on the sledge, accompanied also by Mr. Sherer. They carried with them a quantity of bread-dust to be distributed among the Esquimaux at the huts, their success in seal-catching having lately been indifferent. . . .

In digging up the piece of ground for our garden, we found an incredible quantity of bones scattered about and concealed under the little soil there was. They were principally those of walruses and seals, and had evidently been left a long time before by Esquimaux, in the course of their wandering visits to the island, being gradually covered by the vegetable mould formed upon the spot which they helped to fertilize. Afterwards, when the land became more clear of snow, this was found to be the case to a much greater extent, every spot of ground upon the south-east point, which was not absolutely a rock, being covered with these relics. Some graves were also discovered, in one of which were a human skull, apparently a hundred

years buried, and some pieces of wood that had probably been parts of spears or arrows almost mouldered to dust. Knowing as we do the antiseptic properties of this climate, animal or vegetable substances in this state of decay convey to the mind an idea of much greater age than they would in any other part of the world.

[Escape from their winter quarters was not accomplished till the 1st of July, they having been for nine months frozen in the ice.]

FUGITIVES FROM THE ARCTIC SEAS.

ELISHA KENT KANE.

[Of all works of travel in the Arctic seas, none have attracted more attention than Dr. Kane's "Arctic Explorations," an attractively written journal of hardship and adventure that had the interest of a romance to most readers. The expedition ended in the enforced abandonment of the ship and a long boat journey over the ice, in which the adventurers experienced many perils and suffered much from hunger. We give the concluding incidents of this journey.]

IT was the 18th of July before the aspects of the ice about us gave me the hope of progress. We had prepared ourselves for the new encounter with the sea and its trials by laying in a store of lumme [an Arctic bird], two hundred and fifty of which had been duly skinned, spread open, and dried on the rocks as the *entremets* of our bread-dust and tallow.

My journal tells of disaster in its record of our setting out. In launching the "Hope" from the frail and perishing ice-wharf on which we found our first refuge from the gale, she was precipitated into the sludge below, carrying away rail and bulwark, losing overboard our best shot-gun, Bon-

sall's favorite, and, worst of all, that universal favorite, our kettle,—soup-kettle, paste-kettle, tea-kettle, water-kettle, in one. I may mention before I pass that the kettle found its substitute and successor in the remains of a tin can which a good aunt of mine had filled with ginger-nuts two years before, and which had long survived the condiments that once gave it dignity. "Such are the uses of adversity."

Our descent to the coast followed the margin of the fast ice. After passing the Crimson Cliffs of Sir John Ross it wore almost the dress of a holiday excursion,—a rude one, perhaps, yet truly one in feeling. Our course, except where a protruding glacier interfered with it, was nearly parallel to the shore. The birds along it were rejoicing in the young summer, and when we halted it was upon some green-clothed cape near a stream of water from the ice-fields above. Our sportsmen would clamber up the cliffs and come back laden with little auks; great generous fires of turf, that cost nothing but the toil of gathering, blazed merrily; and our happy oarsmen, after a long day's work, made easy by the promise ahead, would stretch themselves in the sunshine and dream happily away till called to the morning wash and prayers. We enjoyed it the more, for we all of us knew that it could not last.

This coast must have been a favorite region at one time with the natives,—a sort of Esquimaux Eden. We seldom encamped without finding the ruins of their habitations, for the most part overgrown with lichens, and exhibiting every mark of antiquity. One of these, in latitude 76° 20′, was once, no doubt, an extensive village. Cairns for the safe deposit of meat stood in long lines, six or eight in a group; and the huts, built of large rocks, faced each other, as if disposed on a street or avenue.

The same reasoning which deduces the subsidence of the coast from the actual base of the Temple of Serapis, proves

that the depression of the Greenland coast, which I had detected as far north as Upernavik, is also going on up here. Some of these huts were washed by the sea or torn away by the ice that had descended with the tides. The turf, too, a representative of very ancient growth, was cut off even with the water's edge, giving sections two feet thick. I had not noticed before such unmistakable evidence of the depression of this coast: its converse elevation I had observed to the north of Wostenholme Sound. The axis of oscillation must be somewhere in the neighborhood of latitude 77°.

We reached Cape York on the 21st, after a tortuous but romantic travel through a misty atmosphere. Here the land-leads ceased, with the exception of some small and scarcely practicable openings near the shore, which were evidently owing to the wind that prevailed for the time. Everything bore proof of the late development of the season. The red snow was a fortnight behind its time. A fast floe extended with numerous tongues far out to the south and east. The only question was between a new rest, for the shore-ices to open, or a desertion of the coast and a trial of the open water to the west.

[They had at this time but thirty-six pounds of food per man and fuel enough to last them three weeks.]

I climbed the rocks a second time with Mr. McGary, and took a careful survey of the ice with my glass. The "fast," as the whalers call the immovable shore-ice, could be seen in a nearly unbroken sweep, passing by Bushnell's Island, and joining the coast not far from where I stood. The outside floes were large, and had evidently been not long broken; but it cheered my heart to see that there was one well defined lead which followed the main floe until it lost itself to seaward.

I called my officers together, explained to them the motives which governed me, and prepared to re-embark. The boats were hauled up, examined carefully, and, as far as our means permitted, repaired. The "Red Eric" was stripped of her outfit and cargo, to be broken up for fuel when the occasion should come. A large beacon-cairn was built on an eminence, open to view from the south and west, and a red flannel shirt, spared with some reluctance, was hoisted as a pennant to draw attention to the spot. Here I deposited a succinct record of our condition and purposes, and then directed our course south by west into the ice-fields.

By degrees the ice through which we were moving became more and more impacted, and it sometimes required all our ice-knowledge to determine whether a particular lead was practicable or not. The irregularities of the surface, broken by hummocks, and occasionally by larger masses, made it difficult to see far ahead, besides which we were often embarrassed by the fogs. I was awakened one evening from a weary sleep in my fox-skins to discover that we had fairly lost our way. The officer at the helm of the leading boat, misled by the irregular shape of a large iceberg that crossed his track, had lost the main lead some time before, and was steering shoreward, far out of the true course. The little canal in which he had locked us was hardly two boats'-lengths across, and lost itself not far off in a feeble zigzag both behind and before us; it was evidently closing, and we could not retreat.

Without apprising the men of our misadventure, I ordered the boats hauled up, and, under pretence of drying the clothing and stores, made a camp on the ice. A few hours after the weather cleared enough for the first time to allow a view of the distance, and McGary and myself climbed a berg some three hundred feet high for the pur-

pose. It was truly fearful; we were deep in the recesses of the bay, surrounded on all sides by stupendous icebergs and tangled floe-pieces. My sturdy second officer, not naturally impressible, and long accustomed to the vicissitudes of whaling life, shed tears at the prospect.

There was but one thing to be done: cost what it might, we must harness our sledges again and retrace our way to the westward. One sledge had been already used for firewood; the "Red Eric," to which it had belonged, was now cut up, and her light cedar planking laid upon the floor of the other boats, and we went to work with the rue-raddies as in the olden time. It was not till the third toilsome day was well spent that we reached the berg that had bewildered our helmsman. We hauled over its tongue and joyously embarked again upon a free lead, with a fine breeze from the north.

Our little squadron was now reduced to two boats. The land to the northward was no longer visible, and whenever I left the margin of the fast to avoid its deep sinuosities, I was obliged to trust entirely to the compass. We had at least eight days' allowance of fuel on board; but our provisions were running very low, and we met few birds, and failed to secure any larger game. We saw several large seals upon the ice, but they were too watchful for us; and on two occasions we came upon the walrus sleeping, once within actual lance-thrust; but the animal charged in the teeth of his assailant and made good his retreat.

On the 28th I instituted a quiet review of the state of things before us. Our draft on the stores we had laid in at Providence Halt had been limited for some days to three raw eggs and two breasts of birds a day, but we had a small ration of bread-dust besides; and when we halted, as we did regularly for meals, our fuel allowed us to indulge lavishly in the great panacea of Arctic travel, tea. The

men's strength was waning under this restricted diet, but a careful reckoning up of our remaining supplies proved to me now that even this was more than we could afford ourselves without an undue reliance on the fortunes of the hunt. Our next land was to be Cape Shackleton, one of the most prolific bird-colonies of the coast, which we were all looking to, much as sailors nearing home in their boats after disaster and short allowance at sea. But, meting out our stores through the number of days that must elapse before we could expect to share its hospitable welcome, I found that five ounces of bread-dust, four of tallow, and three of bird-meat must from this time form our daily ration.

So far we had generally coasted the fast ice; it had given us an occasional resting-place and refuge, and we were able sometimes to reinforce our stores of provisions by our guns. But it made our progress tediously slow, and our stock of small shot was so nearly exhausted that I was convinced our safety depended on increase of speed. I determined to try the more open sea.

For the first two days the experiment was a failure. We were surrounded by heavy fogs; a southwest wind brought the outside pack upon us, and obliged us to haul up on the drifting ice. We were thus carried to the northward, and lost about twenty miles. My party, much overworked, felt despondingly the want of the protection of the land-floes.

Nevertheless, I held to my purpose, steering south-southwest as nearly as the leads would admit, and looking constantly for the thinning out of the pack that hangs around the western water.

Although the low diet and exposure to wet had again reduced our party, there was no apparent relaxation of energy, and it was not until some days later that I found their strength seriously giving way.

It is a little curious that the effect of a short allowance of food does not show itself in hunger. The first symptom is a loss of power, often so imperceptibly brought on that it becomes evident only by an accident. I well remember our look of blank amazement as, one day, the order being given to haul the "Hope" over a tongue of ice, we found she would not budge. At first I thought it was owing to the wetness of the snow-covered surface in which her runners were; but, as there was a heavy gale blowing outside, and I was extremely anxious to get her on to a larger floe to prevent being drifted off, I lightened her cargo and set both crews upon her. In the land of promise off Crimson Cliffs such a force would have trundled her like a wheelbarrow: we could almost have borne her upon our backs. Now with incessant labor and standing hauls she moved at a snail's pace.

The "Faith" was left behind and barely escaped destruction. The outside pressure cleft the floe asunder, and we saw our best boat with all our stores drifting rapidly away from us. The sight produced an almost hysterical impression upon our party. Two days of want of bread, I am sure, would have destroyed us; and we had now left us but eight pounds of shot in all. To launch the "Hope" again, and rescue her comrade or share her fortunes, would have been the instinct of other circumstances; but it was out of the question now. Happily, before we had time to ponder our loss a flat cake of ice eddied round near the floe we were upon; McGary and myself sprang to it at the moment, and succeeded in floating it across the chasm in time to secure her. The rest of the crew rejoined her only by scrambling over the crushed ice as we brought her in at the hummock-lines.

Things grew worse and worse with us; the old difficulty of breathing came back again, and our feet swelled to such

an extent that we were obliged to cut open our canvas boots. But the symptom which gave me most uneasiness was our inability to sleep. A form of low fever which hung by us when at work had been kept down by the thoroughness of our daily rest; all my hopes of escape were in the refreshing influences of the halt.

It must be remembered that we were now in the open bay, in the full line of the great ice-drift to the Atlantic, and in boats so frail and unseaworthy as to require constant baling to keep them afloat.

It was at this crisis of our fortunes that we saw a large seal floating—as is the custom of these animals—on a small patch of ice, and seemingly asleep. It was an ussuk, and so large that I at first mistook it for a walrus. Signal was made for the "Hope" to follow astern, and, trembling with anxiety, we prepared to crawl down upon him.

Petersen, with the large English rifle, was stationed in the bow, and stockings were drawn over the oars as mufflers. As we neared the animal our excitement became so intense that the men could hardly keep stroke. I had a set of signals for such occasions which spared us the noise of the voice; and when about three hundred yards off the oars were taken in, and we moved in deep silence with a single scull astern.

He was not asleep, for he reared his head when we were almost within rifle-shot; and to this day I can remember the hard, careworn, almost despairing expression of the men's thin faces as they saw him move; their lives depended on his capture.

I depressed my hand nervously, as a signal for Petersen to fire. McGary hung upon his oar, and the boat, slowly but noiselessly sagging ahead, seemed to me within certain range. Looking at Petersen, I saw that the poor fellow was paralyzed by his anxiety, trying vainly to obtain a

rest for his gun against the cut-water of the boat. The seal rose on his fore-flippers, gazed at us for a moment with frightened curiosity, and coiled himself for a plunge. At that instant, simultaneously with the crack of our rifle, he relaxed his long length on the ice, and, at the very brink of the water, his head fell helpless to one side.

I would have ordered another shot, but no discipline could have controlled the men. With a wild yell, each vociferating according to his own impulse, they urged both boats upon the floes. A crowd of hands seized the seal and bore him up to safer ice. The men seemed half crazy; I had not realized how much we were reduced by absolute famine. They ran over the floe crying and laughing and brandishing their knives. It was not five minutes before every man was sucking his bloody fingers or mouthing long strips of raw blubber.

Not an ounce of this seal was lost. The intestines found their way into the soup-kettles without any observances of the preliminary home processes. The cartilaginous parts of the fore-flippers were cut off in the *mêlée* and passed round to be chewed upon; and even the liver, warm and raw as it was, bade fair to be eaten before it had seen the pot. That night, on the large halting floe, to which, in contempt of the dangers of drifting, we happy men had hauled our boats, two entire planks of the "Red Eric" were devoted to a grand cooking-fire, and we enjoyed a rare and savage feast.

This was our last experience of the disagreeable effects of hunger. In the words of George Stephenson, "The charm was broken, and the dogs were safe." The dogs I have said little about, for none of us liked to think of them. The poor creatures Toodla and Whitey had been taken with us as last resources against starvation. They were, as McGary worded it, "meat on the hoof," and "able to

carry their own fat over the floes." Once, near Weary Man's Rest, I had been on the point of killing them; but they had been the leaders of our winter's team, and we could not bear the sacrifice.

I need not detail our journey any farther. Within a day or two we shot another seal, and from that time forward had a full supply of food. . . . Two days after this, a mist had settled down upon the islands which embayed us, and when it lifted we found ourselves rowing, in lazy time, under the shadow of Karkamoot. Just then a familiar sound came to us over the water. We had often listened to the screeching of the gulls or the bark of the fox and mistaken it for the "Huk" of the Esquimaux, but this had about it an inflection not to be mistaken, for it died away in the familiar cadence of an "halloo."

"Listen, Petersen! Oars, men!" "What is it?" and he listened quietly at first, and then, trembling, said in a half-whisper, "Dannemarkers!"

I remember this, the first tone of Christian voice which had greeted our return to the world. How we all stood up and peered into the distant nooks; and how the cry came to us again, just as, having seen nothing, we were doubting whether the whole was not a dream; and then how, with long sweeps, the white ash cracking under the spring of the rowers, we stood for the cape that the sound proceeded from, and how nervously we scanned the green spots which our experience, grown now into instinct, told us would be the likely camping-ground of wayfarers.

By and by—for we must have been pulling a good half-hour—the single mast of a small shallop showed itself; and Petersen, who had been very quiet and grave, burst into an incoherent fit of crying, only relieved by broken exclamations of mingled Danish and English. "'Tis the Upernavik oil-boat! The 'Fräulein Flaischer!' Carlie

Mossyn, the assistant cooper, must be on his road to Kingatok for blubber. The 'Mariane' (the one annual ship) has come, and Carlie Mossyn——" and here he did it all over again, gulping down his words and wringing his hands.

It was Carlie Mossyn, sure enough. The quiet routine of a Danish settlement is the same year after year, and Petersen had hit upon the exact state of things. The "Mariane" was at Proven, and Carlie Mossyn had come up in the "Fräulein Flaischer" to get the year's supply of blubber from Kingatok.

RESCUED FROM DEATH.

W. S. SCHLEY.

[In the whole history of Arctic exploration there is no story more replete with the elements of tragedy than that of Lieutenant A. W. Greely and his brave companions. Sailing to the far north in 1881 on a scientific expedition, misfortune overtook the party, largely due to the failure of the relief expeditions of 1882 and 1883 to reach them. The imperilled navigators left their vessel and made their way down the coast, suffering terribly from cold and hunger, and were in the throes of starvation when finally rescued by the relief expedition of 1884. Many of them had already died, and but a perishing remnant was left when they were at length discovered in their final place of refuge. The story of their discovery and rescue, as told by Commander W. S. Schley and Professor J. R. Soley, in their "Rescue of Greely," is tragically dramatic, and we make it the subject of our present selection. The relief vessels, the "Thetis" and the "Bear," examining the coast in the vicinity of Cape York, found that there was no trace of the sufferers at Littleton Island. Thence they made their way to Brevoort Island, near Cape Sabine, and from there sent out four parties to examine the coast in different directions.]

IT was intended that, as soon as a satisfactory examination had been made and a depot landed, the ships should

advance without delay into Kane Sea. There was no expectation of finding that any one had been at the cape, or that the cairns or caches had been disturbed, as it was clear that if Greely had arrived he would have been short of provisions, and would therefore have sought to obtain those at Littleton Island; and nobody could have imagined for a moment that with prospective starvation on one side of the strait, and a provision depot (although a small one) twenty-three miles off on the other, a party supplied with a boat and oars would have preferred the former alternative. In fact, at the time the cutter started, the crew of the "Bear" were getting provisions on deck, to be in readiness for the sledge journey that was to be made northward, after the ships were stopped by the fast ice. As the cutter left the ship, Colwell picked up a can of hard-tack and two one-pound cans of pemmican, as he thought that his party might be out all night, and a little of something to eat would not go amiss.

Within half an hour after the first parties had left the ship cheers were heard above the roaring of the wind. At first it was impossible to tell from what quarter the sound proceeded, but soon the cheering was heard a second time more distinctly, in the direction of Brevoort Island. Almost immediately after, Ensign Harlow was observed signalling from Stalknecht Island. His message read, "Have found Greely's record; send five men."

Before this request could be carried out, Yewell was seen running over the ice towards the ships, and a few minutes later he came on board, almost out of breath, with the information that Lieutenant Taunt had found a message from Greely in the cairn on Brevoort Island. Yewell brought the papers with him, and called out, as he gave them to the officer of the deck, that Greely's party were at Cape Sabine, all well. The excitement of the moment was

intense, and it spread with the rapidity of lightning through both the ships. It was decided instantly to go on to the Cape, and a general recall was sounded by three long blasts from the steam-whistle of the "Thetis."

The first thing to be done before taking definite action was to go carefully over the papers that Taunt had found. All the officers who had remained behind in the two ships gathered around the wardroom table of the "Thetis," and the records were hurriedly read aloud. As one paper after another was quickly turned over, until the last was reached, it was discovered with horror that the latest date borne by any of them was October 21, 1883, and that but forty days' complete rations were left to live upon. Eight months had elapsed since then, and the belief was almost irresistible that the whole party must have perished during this terrible period of waiting and watching for relief. . . .

It was a wonderful story. It told how the expedition, during its two years at Lady Franklin Bay, had marked out the interior of Grinnell Land, and how Lockwood had followed the northern shore of Greenland, and had reclaimed for America the honor of "the farthest north." But there was no time now to think of what the expedition had accomplished; that was already a matter of history. The pressing question was, Where was Greely's party now? and to that question it was too probable that there was but one answer.

The records had named the wreck-cache as the site of Greely's camp, and preparations were made at once to go there. The cutter, with Colwell and his party on board, had not yet got away, having been stopped by the cries from the shore, and she now steamed back under the stern of the "Thetis." Colwell was directed to go to the site of the cache and look for the explorers; and if any were alive, —of which the record gave little hope,—to tell them that

relief was close at hand. As he was about to leave, he called out for a boat-flag, and one was thrown to him from the ship. This was bent on a boat-hook and set up in the stern of the boat.

Before the cutter had disappeared to the northward the commander of the expedition had gone on board the "Bear," and the ship was under way, following the track of the cutter around the cape. The detachment under Harlow, which had found Greely's scientific records and instruments on Stalknecht Island, and the other party under Melville, some of whom had not yet returned, were to come after in the "Thetis," which was left behind to pick them up. The passage which the ships and the cutter were to make was about six miles, although from Payer Harbor to the wreck-cache, in a straight line, across the rugged neck of intervening land, it was less than half that distance. Fortunately, the southerly gale had set the ice off shore into Kane Sea, leaving a clear passage around for the vessels.

It was half-past eight o'clock in the evening as the cutter steamed around the rocky bluff of Cape Sabine and made her way to the cove, four miles farther on, which Colwell remembered so well from his hurried landing with the stores on the terrible night following the wreck of the "Proteus." The storm, which had been raging with only slight intervals since early the day before, still kept up, and the wind was driving in bitter gusts through the openings in the ridge that followed the coast to the westward. Although the sky was overcast, it was broad daylight,—the daylight of a dull winter afternoon,—and as the cutter passed along, Colwell could recognize the familiar landmarks of the year before; the long sweep of the rocky coast, with its ice-foot spanning every cove, the snow gathered in the crevices, the projecting headlands, and the line

of the ice-pack which had ground up the "Proteus," dimly seen in the mists to the north, across the tossing waters of Kane Sea. At last the boat arrived at the site of the wreck-cache, and the shore was eagerly scanned, but nothing could be seen. Rounding the next point, the cutter opened out the cove beyond. There, on the top of a little ridge, fifty or sixty yards above the ice-foot, was plainly outlined the figure of a man. Instantly the coxswain caught up the boat-hook and waved his flag. The man on the ridge had seen them, for he stooped, picked up a signal-flag from the rock, and waved it in reply. Then he was seen coming slowly and cautiously down the steep rocky slope. Twice he fell down before he reached the foot. As he approached, still walking feebly and with difficulty, Colwell hailed him from the bow of the boat.

"Who all are there left?"

"Seven left."

As the cutter struck the ice, Colwell jumped off and went up to him. He was a ghastly sight. His cheeks were hollow, his eyes wild, his hair and beard long and matted. His army blouse, covering several thicknesses of shirts and jackets, was ragged and dirty. He wore a little fur cap and rough moccasins of untanned leather tied around the leg. As he spoke, his utterance was thick and mumbling, and in his agitation his jaws worked in convulsive twitches. As the two met, the man, with a sudden impulse, took off his glove and shook Colwell's hand.

"Where are they?" asked Colwell, briefly.

"In the tent," said the man, pointing over his shoulder; "over the hill; the tent is down."

"Is Mr. Greely alive?"

"Yes, Greely's alive."

"Any other officers?"

"No." Then he repeated, absently, "The tent is down."

"Who are you?"

"Long."

Before this colloquy was over Lowe and Norman had started up the hill. Hastily filling his pockets with bread, and taking the two cans of pemmican, Colwell told the coxswain to take Long into the cutter, and started after the others with Ash. Reaching the crest of the ridge, and looking southward, they saw spread out before them a desolate expanse of rocky ground, sloping gradually from a ridge on the east to the ice-covered shore, which at the west made in and formed a cove. Back of the level space was a range of hills rising up eight hundred feet, with a precipitous face, broken in two by a gorge, through which the wind was blowing furiously. On a little elevation directly in front was the tent. Hurrying on across the intervening hollow, Colwell came up with Lowe and Norman just as they were greeting a soldierly-looking man who had come out from the tent.

As Colwell approached, Norman was saying to the man,—

"There is the lieutenant."

And he added to Colwell,—

"This is Sergeant Brainard."

Brainard immediately drew himself up to the position of the soldier, and was about to salute when Colwell took his hand.

At this moment there was a confused murmur within the tent, and a voice said,—

"Who's there?"

Norman answered, "It's Norman,—Norman who was in the 'Proteus.'"

This was followed by cries of "Oh, it's Norman!" and a sound like a feeble cheer.

Meanwhile, one of the relief party, who in his agitation and excitement was crying like a child, was down on his

hands and knees trying to roll away the stones that held down the flapping tent cloth. The tent was a "tepik," or wigwam tent, with a fly attached. The fly, with its posts and ridge-pole, had been wrecked by the gale which had been blowing for thirty-six hours, and the pole of the tepik was toppling over, and only kept in place by the guy-ropes. There was no entrance except under the flap opening, which was held down by stones. Colwell called for a knife, cut a slit in the tent-cover, and looked in.

It was a sight of horror. On one side, close to the opening, with his head towards the outside, lay what was apparently a dead man. His jaw had dropped, his eyes were open, but fixed and glassy, his limbs were motionless. On the opposite was a poor fellow, alive to be sure, but without hands or feet, and with a spoon tied to the stump of his right arm. Two others seated on the ground, in the middle, had just got down a rubber bottle that hung on the tent-pole, and were pouring from it into a tin can. Directly opposite, on his hands and knees, was a dark man with a long matted beard, in a dirty and tattered dressing-gown, with a little red skull-cap on his head, and brilliant staring eyes. As Colwell appeared, he raised himself a little, and put on a pair of eye-glasses.

"Who are you?" asked Colwell.

The man made no answer, staring at him vacantly.

"Who are you?" again.

One of the men spoke up: "That's the major,—Major Greely."

Colwell crawled in and took him by the hand, saying to him, "Greely, is this you?"

"Yes," said Greely in a faint broken voice, hesitating and shuffling with his words, "yes—seven of us left—here we are—dying—like men. Did what I came to do—beat the best record."

Then he fell back exhausted.

The four men in the tent with Greely were two sergeants, Elison and Fredericks; Bierderbick, the hospital steward; and Private Connell, who, with Brainard and Long, were all that remained of the twenty-five members of the Lady Franklin Bay Expedition. The scene, as Colwell looked around, was one of misery and squalor. The rocky floor was covered with cast-off clothes, and among them were huddled together the sleeping-bags in which the party had spent most of their time during the last few months. There was no food left in the tent but two or three cans of a thin, repulsive-looking jelly, made by boiling strips cut from the seal-skin clothing. The bottle on the tent-pole still held a few teaspoonfuls of brandy, but it was their last, and they were sharing it as Colwell entered; it was evident that most of them had not long to live. . . .

As soon as Colwell understood the condition of affairs, he sent Chief-Engineer Lowe back to the cutter to put off to the "Bear" with Long, to report what had happened, and bring off the others with the surgeon and stimulants. Fredericks and Bierderbick presently got up and came out. Colwell gave them, as well as Greely and Elison, a little of the biscuit he had in his pocket, which they munched slowly and deliberately. Then he gave them another bit, while Norman opened one of the cans of pemmican. Scraping off a little with a knife, Colwell fed them slowly by turns. It was a pitiable sight. They could not stand up, and had dropped down on their knees, and held out their hands begging for more. After they had each been fed twice, they were told that they had had enough, that they could not eat more then without danger; but their hunger had now come back with full force, and they begged piteously to be helped again, protesting that it could do them no harm. Colwell was wisely deaf to their entreaties

and threw away the can. When Greely found that he was refused he took out a can of the boiled seal-skin, which had been carefully husbanded, and which he said he had a right to eat, as it was his own. This was taken away from him, but while Colwell was at work trying to raise the tent, some one got the half-emptied can of pemmican, and by the time it was discovered had eaten its contents.

The weaker ones were like children, petulant, rambling and fitful in their talk, absent, and sometimes a little incoherent. While they were waiting for the return of the boat, Colwell and the ice-masters did their best to cheer them up by telling them that relief was at hand, and that the others would soon arrive. They could not realize it, and refused to believe it. So they were humored, and by way of taking up their thoughts, Colwell told them something of what had been going on in the world during their three years of exile. Curiously enough, there was much that they knew already. It turned out that among the stores from the "Proteus" were two boxes of lemons, and the fruit had been wrapped up in scraps of English newspapers, —"those lemons which your dear wife put up for us," as one of them said to Colwell in a moment of wandering fancy. The latter could only disclaim the imaginary obligation to an imaginary person, but the impression had already faded.

As Greely complained of cold, Colwell gave him his gloves, and persuaded him to go back to his sleeping-bag. This was lying under the fallen tent-cloth, which the party had been too weak or too discouraged to raise up and disengage. Where the single remaining pole supported the tent there was a clear space of perhaps six feet, just enough for a man to stand upright, but around it the canvas was lying on the ground. The bag, from which Greely had hardly moved for a month, was found under the

canvas, and by the united efforts of the three men the tent was partly raised.

Meanwhile, the "Bear" had arrived and Lowe had gone off in the cutter, taking with him Sergeant Long. Long was too weak to get on board without assistance, and was lifted over the side by some of the crew and taken to a chair in the wardroom. In reply to questions about the party and their condition, Long, in a husky voice, told his story: that all were dead except Greely and five others, who were on shore in "sore distress—sore distress;" that they had had a hard winter, and "the wonder was how in God's name they had pulled through." No words can describe the pathos of this man's broken and enfeebled utterance as he said, over and over, "a hard winter—a hard winter;" and the officers who were gathered about him in the wardroom felt an emotion which most of them were at little pains to conceal. The first sign of the relief expedition which had reached the camp was the sound from the steam whistle of the "Thetis," recalling the shore parties at Payer Harbor. Lieutenant Greely, lying on the ground in his tent, had heard it, as it was borne faintly over the neck of land, but the others had not noticed it in the roaring wind, and when he told them he had heard a steamer's whistle, they thought it only the impression of his disturbed imagination. Long crawled out of the tent and, bracing himself against the wind, struggled up to the ridge; but nothing could be seen but the rocky coast, and the ice-foot, and the chopping sea with the pack stretching off in the distance. It was a bitter disappointment. Long went back disheartened, but after waiting uneasily awhile longer, he mounted the ridge a second time. Still there was nothing to be seen but the same hopeless prospect, and he was about to return again when the cutter came into view around the point above. After all these months of waiting

it was hard to believe that he was not dreaming, but when he saw the coxswain wave the familiar flag, he knew that relief had come at last.

[The conclusion of the story is longer than we have space to give. It will suffice to say that the survivors were gradually brought back to life and health, and that the living and the bodies of the dead alike were brought back to the United States; and that in the robust-appearing General Greely of to-day there is nothing to indicate the terrible strain of that dread winter in the realm of ice.]

THE MUIR GLACIER.

SEPTIMA M. COLLIS.

[No other country in the world possesses so many unique wonders of nature as the United States. The Yosemite Valley, Yellowstone Park, Mammoth Cave, Niagara Falls, and Sequoia Groves each stands alone in its peculiar beauty or grandeur; and to these we may add the Muir Glacier in Alaska, before which the famous glaciers of the Alps shrink into insignificance, and which has no rival outside the Arctic zone. "A Woman's Trip to Alaska," by Mrs. Collis, gives a vivid and picturesque description of this glacial wonder, which we here append. The sketch given is preceded by a statistical one, in which we are told that this glacier sheds from its front "one hundred and sixty million cubic feet of ice every twenty-four hours."]

THE previous chapter has briefly outlined the main facts within my knowledge concerning the Muir Glacier which I had gathered from my reading, and upon which I had to create the image of what I expected to see. True, I had seen photographs of it; yes, and I had seen photographs of the Cañon of the Yellowstone, and of the Nevada Falls, and of Niagara, just as I have seen paste diamonds; I knew their shapes, and that is all I ever gathered from

their portraits. Neither the expression, nor the complexion, nor the sound of the voice of nature are to be found upon the dull surface of the photograph; you simply get the general lines, some of the shadows, very erroneous perspective, and that is all. We had come to a stand-still while we were at lunch. I had observed the slackening of speed; next the stoppage of the machinery; then the absolute stillness of the ship; and finally a darkening of the saloon. We were evidently at a halt under the shadow of some immense elevation. A passenger on tiptoe looked through the port-hole, and uttered an exclamation of amazement; then we all rushed to similar apertures; climbed on the chairs; looked over the men's shoulders; in fact, did all kinds of unreasonable things, and at last stampeded up the companion-way to the deck.

I pray heaven that neither age nor infirmity may ever efface from my memory the sight and the sensation of that moment. To say that I was transfixed, speechless, fascinated to intoxication by the spell of this marvellous development is no exaggeration. Those who reached the deck first seemed paralyzed, halted, and thus blockaded the way for those who were to follow; others kept within the saloon from choice, as though they dreaded some phenomenal convulsion. I wedged my way as best I could, after the first shock of amazement had subsided, up to the very bow of the ship.

Upon each side of me, half a mile away, rose the same old mountains which I had seen everywhere from Tacoma north; at my feet the same Pacific Ocean, but in front of me, apparently so close that I could almost reach it with my fingers, the perpendicular wall of a cañon, not of rock, nor clay, nor grass, nor forest, but of ice,—a wall of ice a mile in length; and when I say a mile, I mean over eighteen hundred yards of it; and when I speak of ice, I do

not mean the sooty, porous stuff that lodges in the valleys of the Alps; I mean the veritable, pure, clear, crystal ice of the ice-pitcher. A wall a hundred yards high, and in some places towering up an additional fifty; a wall extending down deeper in the ocean than it reaches from the ocean to the sky; hard as adamant, sharp and edged like flint, aqua-marine in color, deepening towards the water into indigo, tipped on the summits and projections with a froth of snow. If I did not know that it was ice, I should believe that it was glass. If I did not know that it was the work of the Creator, I should believe that here had assembled a convocation of architects, who in their collective ingenuity had reproduced a combination of the chefs-d'œuvre of their art; for here were the buttresses of the English abbeys, and flying buttresses of Notre Dame, turrets of the Normans, towers of the early English, spires of the cathedral in Cologne, wonderful unoccupied niches, pilasters of the purest white marble and green malachite, and decorative carving and high polish worthy of Cellini.

It was a cloudy day, yet the front glistened with prismatic splendor. What will it be, I asked myself, if in the afternoon the setting sun shall light it up? But we are too close to it for our own safety, we learn, and are slowly moved back half a mile, where our anchor is dropped and preparations are made to row us on shore to climb to the top of the glacier. While we are moving a sharp detonation rings out like the firing of a rifle, and one of the beautiful spires on the crest of the very centre of the wall is shivered into atoms, and its fragments fall with a splash four hundred feet. Later there is a report as of a cannon, but without result; this, we are told, is the parting of the sea of ice somewhere far back in its mountain home. Presently two similar explosions, evidently right close to us, followed by rumbling echoes, and over topples a huge

MUIR GLACIER, ALASKA

mass weighing tons, which sinks so far that several seconds elapse before it rises to the surface, swaying to and fro until it finds its equilibrium, and then floats down the current, one more turquoise gem added to the chain which precedes it.

And this continued all day, sometimes at intervals of seconds only, sometimes of half an hour, and when we retired at night the explosion and the splash became as monotonous and periodical as the tinkling of the street-car bell or the footstep of the passer-by does at home. There was one tremendous breaking-off towards evening; the sun, as we had hoped, was out in full glory, and at the distance from which we now viewed the glacier it was a mountain of snow-covered ice chopped off in front. For many miles we could see over and beyond the façade, as though looking at a great river of snow; yet the façade itself was a face of corrugated emerald, reflecting the sun's rays at every imaginable angle, and changing and scintillating with every movement of the ship.

Suddenly, near the centre, the top began to incline forward, and the whole face of probably twenty yards in width, from the top of the glacier to the bottom of the bay, fell outward as a ladder would fall, without a break anywhere. There was a tremendous upheaving of the water, of course; then the report of the invariable explosion reached us, but no trace remained of the fallen ice, save the swell in the water, which had almost reached and rocked the steamer. I do not know how much time elapsed before the lovely thing rose to the surface, but it seemed an age, and then it came in a dozen pieces, each of the same exquisite diaphanous blue, which, as they approached us gradually, changed to a clear transparent sapphire.

If it will help to serve the purpose of giving a just idea

of the colossal proportions of the scene I endeavor to describe, let me say that the Capitol at Washington, the City Hall in Philadelphia, the Cathedral, the Equitable, and the Mills Buildings in New York, and all the mammoth newspaper offices in the same city might be floated in front of the Muir Glacier, and yet its emerald walls would overtop and engulf them all. As a contrast to all that is pure and chaste in the scene before us, there rushes out from the eastern end of the glacier a subglacial stream of thick, dirty water, much resembling, as it boils up from its cavernous outlet, the mud geyser of the Yellowstone. This is a perpetually flowing river, charged with sediment and *débris* from the scouring process produced by the friction of the moving ice along its bed of rock; it gives the water in the inlet a thick, gray color, utterly destroying the charm of its otherwise transparent character.

If you are amiable enough to say that what I have written gives a sufficiently correct idea of what you expect to see, I beg to differ from you. No camera, no pencil, no vocabulary, can do more than produce a desire to see for one's self. I can only say that it has been my fortune to behold much that is grand in nature and in art at home and abroad, but the hours spent at Muir Glacier made the great event of my life. If God spares me, I hope to see it often. And fearing I might be accused of exaggeration, which is far from my desire, for I am searching in vain for superlatives which would do the subject justice, let me quote from others who preceded me, and all of whom have established their reputation as authorities.

Miss Kate Field says, "In Switzerland a glacier is a vast bed of dirty, air-holed ice that has fastened itself, like a cold porous plaster, to the side of an Alp. Distance alone lends enchantment to the view. In Alaska a glacier is a wonderful torrent that seems to have been suddenly frozen

when about to plunge into the sea. . . . Think of Niagara Falls frozen stiff, add thirty-six feet to its height, and you have a slight idea of the terminus of Muir Glacier, in front of which your steamer anchors; picture a background of mountains fifteen thousand feet high, all snow-clad, and then imagine a gorgeous sun lighting up the ice-crystals with rainbow coloring. The face of the glacier takes on the hue of aqua-marine, the hue of every bit of floating ice, big and little, that surround the steamer and make navigation serious. These dazzling serpents move at the rate of sixty-four feet a day, tumbling headlong into the sea, and, as they fall, the ear is startled by submarine thunder, the echoes of which resound far and near. Down, down, down goes the berg, and woe to the boat in its way when it rises again to the surface."

Charles Halloek in "Our New Alaska," pp. 172–733: "The glacier wall overhung us with its mighty majesty, three times the height of the steamer's mast or more, and we seemed none too far away to escape the constantly cleaving masses which dropped from its face with deafening detonations. The foam which gathered from the impetus of the plunges surged upward fully two-thirds of the height of the cliff, and the resulting swell tossed the large steamer like a toy, and rolled up in breakers of surf upon the beach. . . . The glacier is by no means smooth, but is seamed and riven in every part by clefts and fissures. It is hollowed into eaverns and grottos, hung with massive stalactites, and fashioned into pinnacles and domes. Every section and configuration has its heart of translucent blue or green, interlaced or bordered by fretted frostwork of intensest white, so that the appearance is at all times gnome-like and supernatural. . . .

"I cannot conceive how any one can sit by and contemplate without emotion the stupendous throes which give

birth to the icebergs, attended with detonations like explosions of artillery, and reverberations of thunder across the sky, and the mighty wreckage which follows each convulsion. Nevertheless, I have seen a lady loll with complaisance in her steamer chair comfortably wrapped for the chilly air, and observe the astounding scene with the same languid contemplation that she would discuss her social fixtures and appointments. Zounds! I believe that such a human negation would calmly view the wrecks of worlds and hear the crack of doom at the final rendering, if it did not affect her set. She could watch, at a suitable distance, the agony of Christian martyrs, the carnage of great battles, the sweep of cyclones, the diluvial submergence. Dynamite would not appall her, but to me it would be the acme of satisfaction, ineffably supreme, to startle such clods of inanition by a cry of mouse, and electrify them into momentary emotion. No vinaigrette would ever mitigate the shock." . . .

Mrs. E. R. Scidmore, in "Journeys in Alaska," says, "Avalanches of crumbling snow and great pieces of the front were continually falling with the roar and crash of artillery, revealing new caverns and rifts of deeper blue light, while the spray dashed high and the great waves rolled along the icy wall, and, widening in their sweep, washed the blocks of floating ice up on the beaches on either side. . . . The nearer one approached the higher the ice-walls seemed, and all along the front there were pinnacles and spires weighing several tons, that seemed on the point of toppling every moment. The great buttresses of ice that rose first from the water and touched the moraine were as solidly white as marble, veined and streaked with rocks and mud, but farther on, as the pressure was greater, the color slowly deepened to turquoise and sapphire blues."

Alexander Badlam, in his "Wonders of Alaska," p. 42,

quotes Professor Muir himself as saying that the front and brow of the glacier were "dashed and sculptured into a maze of yawning chasm, ravines, cañons, crevasses, and a bewildering chaos of architectural forms, beautiful beyond the measure of description, and so bewildering in their beauty as to almost make the spectator believe he was revelling in a dream." "There were," he said, "great clusters of glistening spires, gables, obelisks, monoliths, and castles, standing out boldly against the sky, with bastion and mural, surmounted by fretted cornice, and every interstice and chasm reflecting a sheen of scintillating light and deep-blue shadow, making a combination of color, dazzling, startling, and enchanting."

The next sensation in store for the tourist is the climb to the top of the glacier. All the row-boats were lowered, and about a dozen passengers in each, armed with alpenstocks, were ferried in successive groups from the ship to the eastern beach, a distance of perhaps half a mile, instructions being given to each steersman to keep a sharp lookout for falling icebergs. And here your trouble commences unless you are well advised. The ascent is exceedingly difficult; what looks like a mountain of rock over which you must wend your way to the ice-fields, is really a mountain of ice covered by a layer of slimy mud, crusted with pieces of flinty granite, standing up on end like broken bottle glass on top of a wall. I wore India-rubber high boots when I started, and I needed crutches before I finished. It may be chilly as you leave the ship, according as the sun may be out or in; if chilly, get your escort to carry an extra shawl for you to wrap yourself in when you row back to the ship; if the weather is bright and warm, clothe yourself lightly, for it grows warmer with the glare from the ice and the physical exertion. Be very careful where you step, and if you are wise follow in the footsteps of others; do not

undertake to lead, else one foot may be trying to ascertain the depth of a quagmire and the other exploring a fissure.

After an ascent of perhaps two and a half miles, which seem more like ten, you will find yourself on the edge of a frozen sea, frozen, as it were, while in the throes of a tempest, a bay of storm-tossed waves solidified as by a signal; and this extends as far as the eye can reach up into the mountains towards the north, and several miles across to the hills upon the opposite shore. The ice is by no means clear or brilliant, on the contrary, its color is milky and its formation honey-combed, plastic, porous, and yielding to the tread; besides which it is besmeared with sediment from mountain thaws which have traversed its rifts, and disfigured by fallen logs and drift-wood.

I confess if I visited Muir Glacier a hundred times I should always remain on deck and watch the pyrotechnics of the façade rather than undergo the thankless fatigue of climbing to the top, which is infinitely more laborious than the ascent of Vesuvius on foot through the lava, or any work to be done on the trails of the Yosemite. To those who are willing to undertake it, however, I suggest that when they have ascended the first mile, which will bring them on a line with the top of the wall of the glacier, they should look back at their little tiny ship, floating like the "Maid of the Mist" beneath Niagara, to fully realize the immense proportions of the glacier.

It is said that persons have been missed and never again found who made this ascent, and I know that at least one case is authentic, that of a young clergyman, who, straying away from his companions, was never again seen, though the most diligent search was made for him by his friends and the ship's crew. A slip into one of those crevasses which is covered by a thin coat of ice, means to be precipitated in an instant to a depth where no human aid can

reach you. In fact, I would advise all who wish to preserve the impression of Muir Glacier in its pure, idealized, unsullied grandeur, to stay aboard and gaze on its beautiful face.

It is a Persian custom, after plucking the fruit, to tear it asunder in the middle, hand the sunny side to the friend and throw the other half away, the best portion being the only part good enough for those they love. It is my duty to present to you the better half of the glacier and to cast away the other. Tired, footsore, and muddy, we were all early in bed, and while dozing to sleep I was much impressed with the awful stillness of the hour; everybody had retired, not even the tread of the man on watch was heard, the very machinery was sleeping, but every now and then there was a splash and a report and an echo that brought with them the proof that the forces of nature were ever awake, and that what was, "is, and ever shall be, world without end."

A SUMMER TRIP TO ALASKA.

JAMES A. HARRISON.

[Nature possesses no scenery more beautiful than that to be found on the Pacific coast of Washington and in the island region leading to north Alaska. And the description of it given below is well worth reproduction, for its poetic appreciation of this rich scenic route.]

THE whole fourteen hundred—one might say two thousand—miles of coast extending from Puget's Sound to Behring's Strait is a succession of beautiful and picturesque archipelagoes, consisting of hundreds, if not thousands, of islands, through which there are countless water-caves, lakes, bays, inlets, as smooth as Lake George and the Hud-

son, and far more lovely. The smoothness of the water is such that life on the steamer is a luxurious rest, and the stimulating coolness of the air in summer contributes to pleasant days and delightful nights. Our summer trip covered about two thousand five hundred miles from Portland and back, and we had ample opportunities to stop at the various settlements, talk with the Indians, and collect curiosities.

On leaving Port Townsend early in August, our ship made for the Straits of Georgia, and for a long time followed the aqueous boundary-line between the British and American possessions. The fog dissolved, and we caught views of Smith's Island, Bellingham Bay, and other points. The scenery became river-like, the strait now opening into waveless lakes, now contracting, like the neck of a bottle, into channels where there were counter-currents and chopped seas.

At Active Bay we could not tell which way we were going, the passage seemed closed by lofty mountains, and the sea appeared to flow against their bases; but presently the wall of rock split into a wooded gorge, through which we shot with a graceful curve.

The long meandering line of Vancouver Island followed for three hundred miles on the left, and we crossed the Gulf of Georgia in water of enchanting tranquillity.

Our first days were spent in threading the wilderness of islands off Vancouver, and we were close enough to the coast on the right to see it distinctly. There was the continental coast range of the Cascade Mountains, vanishing streaks of snow and silver on our eastern horizon, rising from five hundred to two thousand five hundred feet above the sea-level. Its peaks lay in every imaginable shape, twisted, coiled, convoluted against the horizon-bar, now running up into a perfect cone, like the Silberhorn of

Switzerland, now elongating in rippling lines along the east, now staining the sky with deep-blue masses of ultramarine flecked with pearly lines.

The smoke of the burning forests of Washington Territory and British Columbia had filled the air for days, and worried us not a little; but one morning we awoke in perfect sunshine, and found an atmosphere impregnated with frosty sparkles from the distant snow-peaks. Just before nightfall, when we were about to cross Queen Charlotte's Sound, a fog came up, and the pilot thought it advisable to lie by for the night, more particularly as the coast is a dangerous one and is strewn with reefs and rocks; so, while we were at dinner, the ship wheeled around, and we reversed our course, going south until we reached Port Alexandria, one of the most perfect little harbors conceivable. It is a cove just like the foot of a stocking; a tiny, circle-shaped island lies in its mouth, and richly-wooded heights throw their green shimmer on the placid water.

Here we lay till morning, as "snug as a bug in a rug." Just before entering the cove, which is only about two hundred yards wide, we saw in the distance an Indian sea-canoe, with its wet paddles flashing in the sun, and the agreeable thought was suggested, Suppose we should be surrounded and scalped in the night! Nothing could have been easier in this lonely neighborhood.

The perpetual wheeling of the vessel in her nautical evolutions as she steamed through each successive archipelago gave rise to ever-new comment on the new vistas and island-combinations before us. The coast of Maine is not to be mentioned in comparison with this, nor the island-dusted Caribbean Sea. These inland-sweeping seas open in long river reaches, beyond which, in sharp sunshine, rise the everlasting peaks, burnished with ice. The shores of British Columbia are densely clothed with diminutive

needle-wood, much of which is dead, so that the pale yellow-green is toned with brown-gray. The water is intensely salt, and is skimmed by wild duck and by low-flying, tufted water-fowl.

As we were passing along one morning, an Indian crew came dashing out in a canoe, with a deer for sale. There were stunted-looking squaws in the boat, and all quacked and gesticulated and grunted after the peculiar linguistic fashion of the neighborhood. These Indians are wonderfully deft with their fingers, and weave bottle-cases, satchels, baskets, and table-mats out of split and dyed grasses with curious delicacy and skill. Their face-type is the homeliest I have seen: enormous skulls, high-angled cheek-bones, blinking black eyes, flattish noses, and shocks of horse-hair. Evidently they are expert huntsmen and sportsmen: often we saw their camp-fires, or a canoe stealing along the silent water, filled with crouching forms.

Day after day there was a never-ending succession of lake-scenery,—long, winding lanes of green water between steep snow-streaked domes and precipices. The evenings softened into singularly lovely nights, with close-hugging shores, volumes of dark, iodine-hued water, lingering stars, and phosphorescence. The light hung over the hyperborean landscape as if loath to leave. At ten o'clock one evening we went out and found the ship steaming up a lane of purple glass,—the water magically still, the air full of soft, plaintive cries from the breeding gulls, the tinkle of the parted sea around our bows, and the dim, spectral water lighted up at the end of the long avenue by a haunting aurora.

Many a time the cabin door formed a delightful frame for a forest-picture,—gliding water, pale-blue sky, a broken shore, and, behind, long lines of brilliant snow-peaks, with their chased and frozen silver. We would lie asleep for a

few moments in the cool dark of the cabin-interior, and then wake up with one of these perfect, swiftly-moving views in the foreground. Before we caught it, often it had gone,—the pale, plenteous beauty of the fir-crowned shore, the dancing islets, the sedgy strand-line, the many-colored rocks, with their pools and fountain-basins of transparent water caught from the deep and held in by their rocky framework in a lightness and purity of crystal dew.

Then the ship ran dangerously near to the coast, or again out into the open sound, with its mediterranean sprinkle of islets, serrated walls of rocks, coves and island-mounds, wherein nested shadows of amethyst or indigo.

The flow of life in some of these coves and estuary-like indentations is marvellous, the fish coming in egg-laden, and looking for streams of fresh water in which to deposit their ova. We anchored in one of these inlets, and found on the land luxuriant ferns and splendid clumps of yellow cedar and hemlock, with snow-banks behind. Half a dozen little bucks and half-breeds were tumbling about in the water through the long afternoon light, which seemed to have an amaranthine quality and to be unfading. The sun did not set till after eight o'clock, and there was cold, ghostly, green light up in the north till nearly midnight. When darkness did come, it was of the genuine cuttle-fish kind,—inky,—splashed with stars. There was now and then a delicate shell of a moon incising the sky against a mountain-side and lending the most fragile transfiguration to its top.

As we approached Fort Wrangel, the ship's company turned out in the sweet evening sunshine and found a glorious panorama awaiting them. The sheen of a mighty mass of embattled peaks and pinnacles and feathery floating snow-points shone high up in the evening air, just mellowing under a magnificent sunset. These mountains guard

the entrance to the Stickeen River and mount up the horizon after the Duke of Clarence Strait has been traversed.

Wrangel itself is most memorably situated just on one side of these sheeny peaks and glaciers, almost in the shadow of the Devil's Thumb, which rises about four hundred feet above its own mountain-cluster and forms one of a throng of confused and radiant *aiguilles* overlooking the Stickeen. The sunset had not entirely faded at nine o'clock, when we touched shore and rejoiced our eyes with a series of wonderful semi-arctic color-pictures,—coal-black islands, purple islands, lilac islands, islands in india-ink and amber, lying in glacier-water of pale green, and above and beyond all the glorious flush of the sun stealing in between the white snow-needles and throwing them out and up into luminous relief.

Opposite the town is an island shaped like the cocked hat of a gendarme, where it was said that the curious polygonal garnets embedded in schist and peculiar to this region are found. There were plenty of them as large as walnuts for sale at twenty-five cents a dozen. Odd carved boxes, too, made of an unknown wood and inlaid with shells, were here in plenty; cases of buckskin, containing the conjuring-sticks or gambling-kits of the Thlinkit medicine-men; loin-cloths, ornamented with multitudes of rattling puffin-beaks; head-dresses of defunct warriors; fantastic and horrible masks; huge spoons carved out of the horns of the mountain-ibex; bead-work on leather; robes of many-colored skins quilted together; images carved to resemble otters; fleecy robes of wild sheep and goat; pipes cut with nude figures; antlers; stuffed animals; white-breasted loons, and the like.

After a short stop for landing the mails, the vessel was soon traversing Wrangel Strait, just under some splendid glaciers and snowy mountains, the water perfectly smooth,

though full of small icebergs, which glittered in the sunshine and had broken off from the descending ice-mass. Enormous rivers of ice flow down between these mountains and debouch in the sea, their current mysteriously stayed by the low temperature. We were particularly fortunate in having fine, clear weather early in the morning, especially at this point, where we could see the great Pattison Glacier. The ship entered the enchanted region through a narrow passage, which one of us christened the "Silver Gates," the Beulah Mountains edging our Pilgrim's Progress in passionless white as we zigzagged along the course.

A little later, the scenery on Frederic Sound became truly transcendent: grand mountains, forms that would be awful but for the sunshine resting on their heads, the lake-like sound, with its blue spits of land and cameo-like promontories profiled against the sky, motionless *glace-de-Venise* water reflecting a thousand shades of azure and gray and white, gulls resting on the water, with white bodies and black tips, almost a complete circle of brilliant snow-banks peeping above the clouds that hung to them amorously, and far-away vistas of blue-white glaciers coming down to meet the water-margin.

Schools of spouting whales played in the distance, and the passengers sent balls out of their pistols hissing on the water, but happily hitting nothing. During the last trip two lovely antlered creatures came swimming along in the water, trying to cross one of the channels to another grazing-ground. They were taken on board, but one of them died.

The next landing-place was Killimoo, a little Indian village on an island surrounded by dim-green heights and flickering, ever-changing mountain-views. It is a great station for drying codfish, long lines of which lay spread

out on the wharf in the sun to dry. As night fell the squaws and Indian maidens gathered the rattling fish-carcasses under little ark-like receptacles, where they lay till morning out of the dew.

At Juneau some of the passengers walked or rowed off to the gold-mines in the mountains, where they picked up specimens of gold-quartz and some teacupfuls of sifted gold-dust. One of these was said to be worth six hundred dollars, another over twelve hundred dollars. One was reminded of the gold-dust story of Alkmaion in Herodotus.

Shortly after this the ship cast anchor at Chilkat and Pyramid Harbor, our two highest points in Alaska waters, about latitude 59° 12′ north. We had but a poor glimpse of the glaciers on the Chilkat side,—one a magnificent down-flow of pale-blue ice, the other a frozen river caught and compressed in between strangling hills.

The location of Pyramid Harbor is very beautiful,—a wind-sheltered nook, a curving shore, covered with pebbles, alder-clad heights just behind, and dimly-flashing ice-peaks peeping out of the mist just over the shoulder of a huge green rock-slope. A salmon-cannery in the foreground, flanked by an Indian village, a semilune of pure green water, nearly fresh, and a curious pyramid-shaped knoll rising from it, constituted other features of the environment. The lifting mists drew aside for a while, and refreshed the sight with views of the great sculpture-lines of the surrounding mountains.

[We may pass the description of Sitka, and proceed.]

We were greatly favored when we left Sitka. Starting off in a rain, in which everything lay in muddy eclipse, we woke up next morning and found ourselves tracing the outside route to the Muir Glacier in sparkling sunshine. The transition was delightful, and, though most of the

passengers were sick from the tossing of the ship on the long outside ocean-swell, I believe they all enjoyed the sunshine as it flashed into their cabin windows, played on the walls, and pricked and scattered the enormous vapor masses that hung over the mountains on our right. There were no longer the vaulted vapors of the preceding days, the dense counterpane of nebulous gray that covered the whole sky with its monotony. The heavy cloud-banks clung to the mountains, leaving an exquisite arc of sky, almost Italian in its sunny azure.

Nothing could be more superb than the deep, dark, velvety tints of the crinkled and crumpled mountains as they shelved to the sea and came in contact there with an edging of foam from the blue Pacific. Huge jelly-fish flapped about in the clear water, nebular patches of protoplasmic existence, capable, apparently, of no other functions than sensation, motion, and self-propagation. Some of them were richly streaked, long-tailed, delicately margined, with comet-like streamers, jelly-frills, and nuclei like a wide-open sunflower. Their motion was so indolently graceful that I could not help gazing at them.

Mount St. Elias! Yes, there it was, they affirmed, on the northeastern horizon, a vapory, unsubstantial cone, dancing up and down in the refracting light. I looked and looked, persuading myself that I saw the glorious vision nineteen thousand five hundred feet high. Others persuaded themselves of the same fact, being naturally ambitious of carrying away remembrances of the tallest mountain in all America. But, after all, I fancy that nobody had a very strong faith in his discovery, particularly as the reputed mountain seemed to change its place, flit hither and thither on the curve of the sky, and finally disappear.

But yonder! What is that? Clouds? Apparently. But look again. What, that small speck just on the edge

of the water? No, higher up—up—up. What a sight! Certainly the grandest view we have had yet. A huge, white, snow-tipped back, like a camel's hump, now loomed apparently right out of the water's edge,—the mighty range of Mount Fairweather, Mount Crillon, and eight or ten other domes and peaks, the highest fifteen thousand five hundred feet high, according to the measurement of the United States Coast Survey. This is the finest mountain-landscape we have ever seen, not even excepting the Alps from Neufchâtel. The peaks looked enormously high as they shot up just behind the sea-edge, far above the first stratum of cloud which ran along midway of the mountain in deep slate-colored belts. Now and then the vapor thinned to the fineness of tulle and Brousa gauze, behind which the mountain-colors loomed in vague and yet radiant purity. Gradually the ardent sun melted away the misty striated belts of cloud, and the great peaks stood out calmly and gloriously effulgent in the crystal August air, a scene of exquisite loveliness and sublimity. At one end a mighty glacier ran down to the sea, and at the other the pygmy mountains (two or three thousand feet high) we had been coasting lay like ebon carvings against the white, a ripple of dark velvet against ermine.

For hours we steamed towards this splendid picture, which, while growing more and more distinct, did not appear to be any nearer than when we first saw it. In the afternoon we turned to the right of this range into icy straits, and soon we were in the midst of a scene more wonderful, perhaps, than that through which we had just passed. On the light-green water lay literally hundreds of icebergs, of all shapes and sizes, some a deep translucent blue, the blue of cobalt, others green, others a pure white, —serrated, castellated, crenellated, glittering,—from the size of a tureen to that of a small church. We seemed on

the point of entering that ancient palæocrystic sea of which the geologists speak,—ice everywhere, our ship cutting its way through impinging ice.

THE FORT WILLIAM HENRY MASSACRE.

JONATHAN CARVER.

[Carver's interesting "Travels through the Interior Parts of North America, in the years 1766, 1767, and 1768," is the source of the narrative given below, relating to an event with which most of our readers are probably familiar from historical reading, though few of them have read the experience of an actual participant. Carver served as a captain in the French and Indian War, and tells this most thrilling narrative of the American wars as an illustrative episode in his subsequent work of travels. He is describing the cruel actions of the Indians in war.]

I HAVE frequently been a spectator of them, and once bore a part in a similar scene. But what added to the horror of it was that I had not the consolation of being able to oppose their savage attacks. Every circumstance of the adventure still dwells on my memory, and enables me to describe with greater perspicuity the brutal fierceness of the Indians when they have surprised or overpowered an enemy.

As a detail of the massacre at Fort William Henry in the year 1757, the scene to which I refer, cannot appear foreign to the design of this publication, but will serve to

give my readers a just idea of the ferocity of this people, I shall take the liberty to insert it, apologizing at the same time for the length of the digression and those egotisms which the relation renders unavoidable.

General Webb, who commanded the English army in North America, which was then encamped at Fort Edward, having intelligence that the French troops under Mons. Montcalm were making some movements towards Fort William Henry, he detached a corps of about fifteen hundred men, consisting of English and provincials, to strengthen the garrison. In this party I went as a volunteer among the latter.

The apprehensions of the English general were not without foundation, for the day after our arrival we saw Lake George (formerly Lake Sacrament), to which it lies contiguous, covered with an immense number of boats, and in a few hours we found our lines attacked by the French general, who had just landed with eleven thousand regulars and Canadians and two thousand Indians. Colonel Munro, a brave officer, commanded in the fort, and had no more than two thousand three hundred men with him, our detachment included.

With these he made a brave defence, and probably would have been able at last to preserve the fort had he been properly supported and permitted to continue his efforts. On every summons to surrender sent by the French general, who offered the most honorable terms, his answer repeatedly was, that he found himself in a condition to repel the most vigorous attacks his besiegers were able to make; and if he thought his present force insufficient, he could soon be supplied with a greater number from the adjacent army.

But the colonel having acquainted General Webb with his situation, and desired he would send him some fresh

troops, the general despatched a messenger to him with a letter, wherein he informed him that it was not in his power to assist him, and therefore gave him orders to surrender up the fort on the best terms he could procure. This packet fell into the hands of the French general, who immediately sent a flag of truce, desiring a conference with the governor.

They accordingly met, attended only by a small guard, in the centre between the lines, when Mons. Montcalm told the colonel that he was come in person to demand possession of the fort, as it belonged to the king, his master. The colonel replied that he knew not how that could be, nor should he surrender it up while it was in his power to defend it.

The French general rejoined, at the same time delivering the packet into the colonel's hand, "By this authority do I make the requisition." The brave governor had no sooner read the contents of it, and was convinced that such were the orders of the commander-in-chief, and not to be disobeyed, than he hung his head in silence, and reluctantly entered into a negotiation.

In consideration of the gallant defence the garrison had made, they were to be permitted to march out with all the honors of war, to be allowed covered wagons to transport their baggage to Fort Edward, and a guard to protect them from the fury of the savages.

The morning after the capitulation was signed, as soon as day broke, the whole garrison, now consisting of about two thousand men, besides women and children, were drawn up within the lines, and on the point of marching off, when great numbers of the Indians gathered about and began to plunder. We were at first in hopes that this was their only view, and suffered them to proceed without opposition. Indeed, it was not in our power to make any,

had we been so inclined, for, though we were permitted to carry off our arms, yet we were not allowed a single round of ammunition. In these hopes, however, we were disappointed; for presently some of them began to attack the sick and wounded, when such as were not able to crawl into the ranks, notwithstanding they endeavored to avert the fury of their enemies by their shrieks or groans, were soon despatched.

Here we were fully in expectation that the disturbance would have concluded, but in a short time we saw the same division driven back, and discovered that we were entirely encircled by the savages. We expected every moment that the guard, which the French, by the articles of capitulation, had agreed to allow us, would have arrived, and put an end to our apprehensions, but none appeared. The Indians now began to strip every one, without exception, of their arms and clothes, and those who made the least resistance felt the weight of their tomahawks.

I happened to be in the rear division, but it was not long before I shared the fate of my companions. Three or four of the savages laid hold of me, and whilst some held their weapons over my head, the others soon disrobed me of my coat, waistcoat, hat, and buckles, omitting not to take from me what money I had in my pocket. As this was transacted close by the passage that led from the lines on to the plain, near which a French sentinel was posted, I ran to him and claimed his protection, but he only called me an English dog, and thrust me with violence back again into the midst of the Indians.

I now endeavored to join a body of our troops that were crowded together at some distance, but innumerable were the blows that were made at me with different weapons as I passed on; luckily, however, the savages were so close together that they could not strike at me without endan-

gering each other, notwithstanding which one of them found means to make a thrust at me with a spear, which grazed my side, and from another I received a wound with the same kind of weapon on my ankle. At length I gained the spot where my countrymen stood, and forced myself into the midst of them. But before I got thus far out of the hands of the Indians the collar and wristbands of my shirt were all that remained of it, and my flesh was scratched and torn in many places by their savage grips.

By this time the war-whoop was given, and the Indians began to murder those that were nearest to them without distinction. It is not in the power of words to give any tolerable idea of the horrid scene that now ensued; men, women, and children were despatched in the most wanton and cruel manner, and immediately scalped. Many of the savages drank the blood of their victims as it flowed warm from the fatal wound.

We now perceived, though too late to avail us, that we were to expect no relief from the French; and that, contrary to the agreement they had so lately signed to allow us a sufficient force to protect us from these insults, they tacitly permitted them; for I could plainly perceive the French officers walking about at some distance, discoursing together with apparent unconcern. For the honor of human nature I would hope that this flagrant breach of every sacred law proceeded rather from the savage disposition of the Indians, which I acknowledge it is sometimes almost impossible to control, and which might now unexpectedly have arrived to a pitch not easily to be restrained, than from any premeditated design in the French commander. An unprejudiced observer would, however, be apt to conclude that a body of ten thousand Christian troops, most Christian troops, had it in their power to prevent the massacre from becoming so general. But what-

ever was the cause from which it arose, the consequences of it were dreadful, and not to be paralleled in modern history.

As the circle in which I stood enclosed by this time was much thinned, and death seemed to be approaching with hasty strides, it was proposed by some of the most resolute to make one vigorous effort, and endeavor to force our way through the savages, the only probable method of preserving our lives that now remained. This, however desperate, was resolved upon, and about twenty of us sprung at once into the midst of them.

In a moment we were separated, and what was the fate of my comrades I could not learn till some months after, when I found that only five or six of them effected their design. Intent only on my own hazardous situation, I endeavored to make my way through my savage enemies in the best manner possible. And I have often been astonished since, when I have recollected with what composure I took, as I did, every necessary step for my preservation. Some I overturned, being at that time young and athletic, and others I passed by, dexterously avoiding their weapons; till at last two very stout chiefs, of the most savage tribes, as I could distinguish by their dress, whose strength I could not resist, laid hold of me by each arm, and began to force me through the crowd.

I now resigned myself to my fate, not doubting but that they intended to despatch me, and then to satiate their vengeance with my blood, as I found they were hurrying me towards a retired swamp that lay at some distance. But before we had got many yards, an English gentleman of some distinction, as I could discover by his breeches, the only covering he had on, which were of fine scarlet velvet, rushed close by us. One of the Indians instantly relinquished his hold, and, springing on this new object, en-

deavored to seize him as his prey; but the gentleman, being strong, threw him on the ground, and would probably have got away, had not he who held my other arm quitted me to assist his brother. I seized the opportunity, and hastened away to join another party of English troops that were yet unbroken, and stood in a body at some distance. But before I had taken many steps I hastily cast my eye towards the gentleman, and saw the Indian's tomahawk gash into his back, and heard him utter his last groan; this added both to my speed and desperation.

I had left this shocking scene but a few yards when a fine boy of about twelve years of age, that had hitherto escaped, came up to me, and begged that I would let him lay hold of me, so that he might stand some chance of getting out of the hands of the savages. I told him that I would give him every assistance in my power, and to this purpose bid him lay hold; but in a few moments he was torn from my side, and by his shrieks I judge was soon demolished. I could not help forgetting my own cares for a minute to lament the fate of so young a sufferer; but it was utterly impossible for me to take any methods to prevent it.

I now got once more into the midst of friends, but we were unable to afford each other any succor. As this was the division that had advanced the farthest from the fort, I thought there might be a possibility (though but a very bare one) of my forcing a way through the outer ranks of the Indians and getting to a neighboring wood, which I perceived at some distance. I was still encouraged to hope by the almost miraculous preservation I had already experienced.

Nor were my hopes vain or the efforts I made ineffectual. Suffice to say that I reached the wood, but by the time I had penetrated a little way into it my breath was so ex-

hausted that I threw myself into a brake, and lay for some minutes apparently at the last gasp. At length I recovered power of respiration, but my apprehensions returned with all their former force when I saw several savages pass by, probably in pursuit of me, at no very great distance.

In this situation I knew not whether it was better to proceed or endeavor to conceal myself where I lay till night came on. Fearing, however, that they would return the same way, I thought it most prudent to get farther from the dreadful scene of my past distresses. Accordingly, striking into another part of the wood, I hastened on as fast as the briers and the loss of one of my shoes would permit me, and, after a slow progress of some hours, gained a hill that overlooked the plain which I had just left, from whence I could discern that the bloody storm still raged with unabated fury.

But not to tire my readers, I shall only add that after passing three days without subsistence, and enduring the severity of the cold dews for three nights, I at length reached Fort Edward; where with proper care my body soon recovered its wonted strength and my mind, as far as the recollection of the late melancholy events would permit, its usual composure.

It was computed that fifteen hundred persons were killed or made prisoners by these savages during this fatal day. Many of the latter were carried off by them and never returned. A few, through favorable accidents, found their way back to their native country after having experienced a long and severe captivity.

The brave Colonel Munro had hastened away, soon after the confusion began, to the French camp to endeavor to procure the guard agreed by the stipulation; but his application proving ineffectual, he remained there till

General Webb sent a party of troops to demand and protect him back to Fort Edward. But these unhappy occurrences, which would probably have been prevented had he been left to pursue his own plans; together with the loss of so many brave fellows, murdered in cold blood, to whose valor he had so lately been a witness, made such an impression on his mind that he did not long survive. He died in about three months of a broken heart, and with truth might it be said that he was an honor to his country.

THE GAUCHO AND HIS HORSE.

THOMAS J. HUTCHINSON.

[Among the skilled horsemen of the earth the gaucho of the plains of Argentina bears pre-eminence. The cow-boy of our Western plains somewhat nearly approaches him, but the cow-boy is only a passing accident, not an institution, like the gaucho, who will still flourish on his native soil when the cow-boy has ceased to be. Hutchinson's "Buenos Ayres and Argentine Gleanings" gives us a well-limned picture of this interesting individual, to which we owe the following selection.]

I CAN hardly consider myself presumptuous in believing that few travellers who have made an ascent of the Paraná for the first time have done so with a more agreeable impression of its beauty than I experienced. The only drawback connected with this pleasure is the consciousness of being unable fully to describe it. My readers will, however, be indulgent enough to give me credit for an effort to do my best.

Our water-way in the little steamer "Dolorcitas," after leaving Buenos Ayres, was through one of the narrow

passages that are the boundaries of islets, higher up than, as well as parallel with, the island of Martin Garcia. As we steam along and pass the estancias of wealthy farmers, I observe on the banks hundreds of cows, large troops of horses, and flocks of sheep, in numbers sufficient to puzzle even the calculating Pedder. There are very few wild trees to be seen, except on the highlands an occasional specimen of the Ombu or Algaroba species. The residences are invariably surrounded by groves or shrubberies of peach-trees. The physical aspect of the islands is quite flat, and until we advance a few hundred miles there is no elevation above a few feet close to the river's side. Now and then—as, for example, when passing through the creek called the "Baradero"—I catch a glimpse of high land, on part of which there is a convent or chapel; but the whole country is uncultivated, except in isolated patches near the compounds of the tillers.

Flocks of wild duck and snipe are seen in abundance; wild turkeys likewise, with occasionally a group of flamingoes, whose scarlet plumage forms a strikingly dazzling object in the bright sunshine. Indeed, birds of various kinds are about us everywhere. Passing through one of these island passages, you see strewing the banks on the mainland side the skeletons of cows and horses, while other poor brutes are lying in the agonies of death; for the mud at the extreme edge of the water is too soft to support them; hence, when they go down to drink, they are swamped in its sponginess, and must therefore remain to die.

Steaming on, we pass or meet several small river-craft engaged in the coasting-trade between Montevideo, Buenos Ayres, and the towns up the river, until we land at an estancia, where cows, horses, and sheep are bred and nurtured: the cows and bullocks chiefly for the hides and meat, disposed of as already described at a saladero; sheep

for their wool; while horses are reared for every possible purpose, and are turned to use whether alive or dead.

Horses dead! Their skins are tanned; the grease of the mare's body is used for light, and for many oleaginous purposes. Close to one of our towns is a rancho or hut belonging to a brick-maker, and there, between his door and the kiln, is an immense pile—as high as an ordinary house—of dead horses, whose bodies are to be used for burning the bricks. Mares' tongues, preserved, are sold in the market as luxuries; hoofs, skulls, shank, thigh, and other bones of the animal, as well as the hair of the mane and tail, are exported hence to England, America, and other places across the sea in large quantities. At the saladeros, too, they slaughter mares in hundreds for their hides and grease, the operation being conducted by crunching the animal's skull with a mallet, after it has been brought to the ground by means of a lasso thrown round the feet. One can scarcely travel a mile through the camp without seeing a dead horse somewhere.

Horses alive! At many stations on the river they fish on horseback, by riding into a considerable depth of water and throwing a peculiar kind of net, which is drawn back to the shore by the horse. Our letters are delivered at the door by a rat-tat in regular English style from the postman, who is on horseback. The daily journal is brought to us by a cavalier, who hands it in without dismounting; even a beggar-man rides up every Saturday to solicit *Una limosna por el amor de Dios*, and he has a license from the police in the shape of a piece of branded wood suspended round his neck. The aristocracy of beggary is evident in this fellow, too; for on one occasion, being offered cold meat and bread by my servant, he rode off, indignantly saying he wanted money to buy cigarritos.

Horses making bricks! Ay, incredible as it may appear,

there are the very animals which dragged the dead bodies of their brethren to be made fuel of at the brick-kilns before mentioned, now driven round and round in a circus, tramping into malleable mud clay and water mixed together, and doing everything in the brick-making except the moulding.

Horses threshing corn! Here at our friend's estancia I see another large circus, styled a *hera*, in which are placed several sheaves of wheat, and into this are turned fifteen to twenty horses; a mounted man goes in also, and drives these animals with whip and yell round the circus until all the corn is threshed by their tramping.

Horses churning butter! A novel sort of thing it is to see a bag made of hides, into which the milk is put when it is turned sufficiently sour; this bag, fastened to a long strip of rope-hide, is attached at the other end to the leather girth which is round the horse's body; the latter is then mounted by a gaucho, and ridden at a hard pace over the camp for a sufficient length of time to secure the making of the butter, by bumping the milk-bag against the ground.

A gaucho without his steed is an impracticability. To move his furniture, consisting of beds, chairs, tables, crockery, or hardware, the horse's back is fitted to the burden. Coffins are conveyed to the burying-ground by being strapped transversely on a horse's loins; and one would scarcely be surprised to hear of a specimen of the semi-centaur under consideration going asleep or cooking his dinner on horseback, more especially with the picture before us of a dentist operating on a poor fellow's grinders, the patient and his physician being both mounted.

No crusader of olden time could have borne himself more proudly at the head of a gallant regiment bound to the Holy Land than does the gaucho, who guides a troop of twenty to thirty carretas, each drawn by six bullocks,

across the Pampas to Cordova or Mendoza. On his saddle, chiefly made of untanned horse-hide and sheep-skin, he sits with the consciousness that he is the horse's master. Indeed, it is rarely that the real gaucho puts his foot in a stirrup,—for practical purposes of riding never,—as it is only on state occasions that he uses them. Stirrups made in this country are of a triangular form, of iron or silver, with the base fabricated after the fashion of a filigree cruet-stand, though on a diminutive scale. At the museum in Buenos Ayres I saw some of these triangular stirrups that were described as having been brought from Paraguay, made from hard wood, so large, clumsy, and heavy as to constitute in themselves a load for a horse. With such heavy stirrups it may be imagined what a weight the gaucho's horse has to bear, when we consider the component parts of the saddle or recado.

[This saddle is a very complex affair, made up of layers of sheep-skin, carpet, cow-hide, woollen cloth, etc., too intricate to be here described. It consists in all of twelve separate parts.]

The skill and endurance of the gaucho in the management of horses is very remarkable. One of these men is reported to have stood on the transverse bar, which crosses over the gate of the corral, and dropped down upon the back of a horse, while the animal, in company with several others, without bridle or saddle, was at full gallop out of the enclosure. What made the feat more adroit was the fact of his having permitted a looker-on to select the horse for him to bestride before the whole lot were driven out. The endurance of the gaucho is also striking; and I have been told of a man, well known at Buenos Ayres, having ridden a distance of seventy leagues—that is to say, two hundred and ten miles—in one day to that city.

Señor Don Carlos Hurtado, of Buenos Ayres, informs me

that the great gaucho game, in which the famous Rosas was most proficient, was what is called *el pialar*,—that is, catching horses by lassoing their feet (the ordinary mode of doing this round the neck is called *enlaser*). Two lines of horsemen, each from ten to twenty in number, are placed at distances so far apart as to allow a mounted gaucho to pass between them. This man is to gallop as fast as he can from one end to the other,—in fact, to run the gauntlet. Every horseman in the lines between which he passes is furnished with a lasso. As he gallops up to the end of the line the first lasso is thrown; should it miss him, the second is cast, and so on. The dexterity evidenced by the watchfulness of men able to throw in such rapid succession after a horse which is galloping, whilst they are standing, is truly expert. At length the horse is pinned, and down he falls as if he were shot. And now the activity of the gaucho is displayed, for he comes on his feet without any injury, smoking his cigarette as coolly as when he lighted it at the starting-post.

The original popularity of Rosas was founded on his gaucho dexterity.

The game of *el pato* is performed by sewing a cooked duck into a piece of hide, leaving a leather point at each end for the hand to grasp. This play having been in former times limited in its carousal to the feast of St. John (or San Juan), a gaucho took it up. Whoever is the smartest secures the duck, and gallops away to any house where he knows a woman residing who bears the name of Juana,—Joan I suppose she would be called in English. It is an established rule that the lady of this name should give a four-real piece (*i.e.*, one shilling and sixpence), either with the original duck returned or another equally complete. Then away he gallops to another house where lives a maiden of the name of Leonora, followed by a troop of

his gaucho colleagues, trying to snap the duck-bag out of his hand. With it, of course, must be delivered up the four-real piece in the best of good humor. Falls and broken legs have often been the result of this game.

Juégo de la sortija is a class of sport played by having a small finger-ring fastened under a gibbet, beneath which a gaucho gallops, and tries to tilt off the ring with a skewer which he holds in his hand. This is done for a prize.

The salutation between two gauchos—even though they be the best of friends—who have not met for a long time is prefixed by a pass of arms with their knives. The conduct of these men is in general marked by sobriety, but when the "patron" pays them their wages they often buy a dozen of brandy or of gin, and this is all drunk, or spilled in drinking, by one man at a single sitting.

It often happens in the gaucho communities that some one gains a reputation for bravery. To prove his courage, this hero goes to a *pulperia*, with a bottle in one hand and a knife in the other, stands at the door, and turns out all the occupants. One gaucho in the north and another in the south hear of each other's bravery, obtain a meeting, and, after returning compliments, draw out their knives and fight to the death.

The gaucho dress is peculiar,—a poncho, which is placed over the head by a hole in the centre, and which falls over the body to the hips. This is often of a very gay pattern, especially on Sundays and holidays. The lower garment is a curious combination of bedgown and Turkish trousers, named *calzonçillos;* it is bordered by a fringe, sometimes of rich lace, from two to six inches in depth. Enormous spurs form part of the toilette. I saw a pair on a gaucho at the estancia of my friend Dr. Perez that measured seven inches in diameter. These were of a larger size than those mentioned by Mr. Darwin in his "Journal of

Researches," describing the "Beagle's" voyage round the world, and which he saw in Chile, measuring six inches in the same direction as aforesaid. The boots for working purposes are made of untanned hide, but those for holiday dress are often of patent leather with bright scarlet tops.

Many of the gauchos wear purple or yellow handkerchiefs over their heads, inside the sombrero, and others have wide belts around their bodies, that are glistening with silver dollars tacked on. The costume of a gaucho is, however, only complete when he is on horseback with the *bolas*, the *lasso*, and a knife at his girdle. The bolas consists of two balls, which are fastened at the end of two short leathern ropes, and thrown by means of another short thong,—all three being secured together,—when they are whirled round the head of the thrower before propulsion, which is so efficaciously managed as to bring down at once the horse or cow in whose legs they get entangled.

Mr. Prescott, in his admirable work on the "History and Conquest of Peru," when alluding to the attack made by the Peruvians on their ancient capital Cuzco, then (A.D. 1535) occupied by the Spanish invaders under Pizarro, writes thus of the lasso: "One weapon peculiar to South American warfare was used to some effect by the Peruvians. This was the lasso,—a long rope with a noose at the end, which they adroitly threw over the rider, or entangled with it the legs of his horse, so as to bring them both to the ground. More than one family fell into the hands of the enemy by this expedient." The knowledge of the weapon was therefore, in all probability, derived from this quarter.

The horse-riding of the Chaco Indians, even in our day, surpasses that of the gaucho. Fancy a troop of horses, apparently riderless, galloping at full speed, yet each of these animals is managed by a man who, with one arm

over the neck of his brute, and with his other hand guiding a bridle as well as grasping a lance, supports the whole weight of his body by the back of the feet near the toes, clinging on the horse's spine above his loins,—the rider's body being thus extended, under cover of the steed's side. As quick as thought he is up and standing on the horse's back with a war-cry of defiance,—although, according to Captain Page, U.S.N., never flinging away his javelin, for with him it must be a hand-to-hand fight,—whilst with equal rapidity he is down again, so as to be protected by the body of the horse, which is all the time in full gallop.

Mr. Coghlan, C.E., and now attached to the Buenos Ayres government, writes of those whom he saw when exploring the Salado del Norte: "The riding of the Indians is wonderful. The gauchos even give their horses some preliminary training; but the Indian catches him (of course with the lasso), throws him down, forces a wooden bit into his mouth, with a piece of hide binds it fast to the lower jaw, and rides him. I have seen a man at the full gallop of his horse put his hand on the mane and jump forward on his feet, letting the animal go on without a check, merely to put his hand to something."

VALPARAISO AND ITS VICINITY.

CHARLES DARWIN.

[It is doubtful if there exists a more interesting work of scientific travel than Darwin's "Journal of Researches into the Natural History and Geology of the Countries visited during the Voyage Round the World of H. M. S. Beagle." Nothing of scientific interest and value seems to have missed the eyes of the indefatigable explorer, and he has described what he saw in so lucid and agreeable a

style as to make his work a veritable classic of travel and research. We give here his description of Valparaiso and the adjoining country.]

July 23.—The "Beagle" anchored late at night in the bay of Valparaiso, the chief seaport of Chile. When morning came everything appeared delightful. After Tierra del Fuego the climate felt quite delicious,—the atmosphere so dry, and the heavens so clear and blue with the sun shining brightly, that all nature seemed sparkling with life. The view from the anchorage is very pretty. The town is built at the very foot of a range of hills, about sixteen hundred feet high and rather steep. From its position it consists of one long, straggling street, which runs parallel to the beach, and wherever a ravine comes down the houses are piled up on each side of it. The rounded hills, being only partially protected by a very scanty vegetation, are worn into numberless little gullies, which expose a singularly bright red soil. From this cause, and from the low whitewashed houses with tile roofs, the view reminded me of St. Cruz in Teneriffe.

In a northeasterly direction there are some fine glimpses of the Andes; but these mountains appear much grander when viewed from the neighboring hills; the great distance at which they are situated can then more readily be perceived. The volcano of Aconcagua is particularly magnificent. This huge and irregularly conical mass has an elevation greater than that of Chimborazo; for, from measurements made by officers of the "Beagle," its height is no less than twenty-three thousand feet. The Cordillera, however, viewed from this point, owe the greater part of their beauty to the atmosphere through which they are seen. When the sun was setting in the Pacific, it was admirable to watch how clearly their rugged outlines could be distinguished, yet how varied and how delicate were the shades of their color.

The immediate neighborhood of Valparaiso is not very productive to the naturalist. During the long summer the wind blows steadily from the southward, and a little off shore, so that rain never falls; during the three winter months, however, it is sufficiently abundant. The vegetation in consequence is very scanty: except in some deep valleys there are no trees, and only a little grass and a few low bushes are scattered over the less steep parts of the hills. When we reflect that at the distance of three hundred and fifty miles to the south this side of the Andes is completely hidden by one impenetrable forest, the contrast is very remarkable.

I took several long walks while collecting objects of natural history. The country is pleasant for exercise. There are many very beautiful flowers; and, as in most other dry climates, the plants and shrubs possess strong and peculiar odors,—even one's clothes in brushing through them became scented. I did not cease from wonder at finding each succeeding day as fine as the foregoing. What a difference does climate make in the enjoyment of life! How opposite are the sensations when viewing black mountains half enveloped in clouds, and seeing another range through the light blue haze of a fine day! The one for a time may be very sublime; the other is all gayety and happy life.

August 14.—I set out on a riding excursion, for the purpose of geologizing the basal parts of the Andes, which alone at this time of the year are not shut up by the winter snow. Our first day's ride was northward along the sea-coast. After dark we reached the Hacienda de Quintero, the estate which formerly belonged to Lord Cochrane. My object in coming here was to see the great beds of shells which stand some yards above the level of the sea, and are burnt for lime. The proofs of the elevation of this

whole line of coast are unequivocal: at the height of a few hundred feet old-looking shells are numerous, and I found some at thirteen hundred feet. These shells either lie loose upon the surface or are embedded in a reddish-black vegetable mould. I was very much surprised to find under the microscope that this vegetable mould is really marine mud, full of minute particles of organic bodies.

15th.—We returned towards the valley of Quillota. The country was exceedingly pleasant, just such as poets would call pastoral; green open lawns, separated by small valleys with rivulets, and the cottages, we may suppose of the shepherds, scattered on the hill-sides. We were obliged to cross the ridge of the Chilicauquen. At its base there were many fine evergreen forest-trees, but these flourished only in the ravines, where there was running water. Any person who had seen only the country near Valparaiso would never have imagined that there had been such picturesque spots in Chile.

As soon as we reached the brow of the Sierra, the valley of Quillota was immediately under our feet. The prospect was one of remarkable artificial luxuriance. The valley is very broad and quite flat, and is thus easily irrigated in all parts. The little square gardens are crowded with orange- and olive-trees and every sort of vegetable. On each side huge bare mountains rise, and this from the contrast renders the patchwork valley the more pleasing. Whoever called Valparaiso the "Valley of Paradise" must have been thinking of Quillota. We crossed over to the Hacienda de San Isidro, situated at the very foot of the Bell Mountain.

Chile, as may be seen in the maps, is a narrow strip of land between the Cordillera and the Pacific; and this strip is itself traversed by several mountain-lines, which in this part run parallel to the great range. Between these outer lines and the main Cordillera a succession of level basins,

generally opening into each other by narrow passages, extend far to the southward; in these the principal towns are situated, as San Felipe, Santiago, San Fernando. These basins or plains, together with the transverse flat valleys (like that of Quillota) which connect them with the coast, I have no doubt are the bottoms of ancient inlets and deep bays, such as at the present day intersect every part of Tierra del Fuego and the western coast. Chile must formerly have resembled the latter country in the configuration of its land and water. The resemblance was occasionally shown strikingly when a level fog-bank covered, as with a mantle, all the lower parts of the country; the white vapor curling into the ravines beautifully represented little coves and bays, and here and there a solitary hillock, peeping up, showed that it had formerly stood there as an islet. The contrast of these flat valleys and basins with the irregular mountains gave the scenery a character which to me was new and very interesting.

From the natural slope to seaward of these plains they are very easily irrigated, and in consequence singularly fertile. Without this process the land would produce scarcely anything, for during the whole summer the sky is cloudless. The mountains and hills are dotted over with bushes and low trees, and excepting these the vegetation is very scanty. Each land-owner in the valley possesses a certain portion of hill-country, where his half-wild cattle, in considerable numbers, manage to find sufficient pasture.

Once every year there is a grand *rodeo*, when all the cattle are driven down, counted, and marked, and a certain number separated to be fattened in the irrigated fields. Wheat is extensively cultivated, and a good deal of Indian corn; a kind of bean is, however, the staple article of food for the common laborers. The orchards produce an overflowing abundance of peaches, figs, and grapes. With all

these advantages, the inhabitants of the country ought to be much more prosperous than they are.

16th.—The major-domo of the hacienda was good enough to give me a guide and fresh horses, and in the morning we set out to ascend the Campana, or Bell Mountain, which is six thousand four hundred feet high. The paths were very bad, but both the geology and scenery amply repaid the trouble. We reached, by the evening, a spring called the Agua del Guanaco, which is situated at a great height. This must be an old name, for it is very many years since a guanaco drank its waters. During the ascent I noticed that nothing but bushes grew on the northern slope, while on the southern slope there was a bamboo about fifteen feet high. In a few places there were palms, and I was surprised to see one at an elevation of at least four thousand five hundred feet. These palms are, for their family, ugly trees. Their stem is very large and of a curious form, being thicker in the middle than at the base or top. They are excessively numerous in some parts of Chile, and valuable on account of a sort of treacle made from the sap.

On one estate near Petorca they tried to count them, but failed, after having numbered several hundred thousand. Every year in the early spring, in August, very many are cut down, and when the trunk is lying on the ground the crown of leaves is lopped off. The sap then immediately begins to flow from the upper end, and continues so doing for some months; it is, however, necessary that a thin slice should be shaved off from that end every morning, so as to expose a fresh surface. A good tree will give ninety gallons, and all this must have been contained in the vessels of the apparently dry trunk. It is said that the sap flows much more quickly on those days when the sun is powerful, and likewise that it is absolutely necessary to take

care, in cutting down the tree, that it should fall with its head upward on the slope of the hill; for if it falls down the slope scarcely any sap will flow, although in that case one would have thought that the action would have been aided, instead of checked, by the force of gravity. The sap is concentrated by boiling, and is then called treacle, which it very much resembles in taste.

We unsaddled our horses near the spring, and prepared to pass the night. The evening was fine, and the atmosphere so clear that the masts of vessels at anchor in the bay of Valparaiso, although no less than twenty-six geographical miles distant, could be distinguished clearly as little black streaks. A ship doubling the point under sail appeared as a bright white speck. Anson expresses much surprise, in his voyage, at the distance at which his vessels were detected from the coast; but he did not sufficiently allow for the height of the land and the great transparency of the air.

The setting of the sun was glorious, the valleys being black, whilst the snowy peaks of the Andes yet retained a ruby tint. When it was dark we made a fire beneath a little arbor of bamboos, fried our *charqui* (or dried slips of beef), took our maté, and were quite comfortable. There is an inexpressible charm in this living in the open air. The evening was calm and still; the shrill noise of the mountain bizcacha and the faint cry of a goatsucker were occasionally to be heard. Besides these, few birds, or even insects, frequent these dry, parched mountains.

17th.—In the morning we climbed up the rough mass of greenstone which crowns the summit. This rock, as frequently happens, was much shattered and broken into huge angular fragments. I observed, however, one remarkable circumstance,—namely, that many of the surfaces presented every degree of freshness, some appearing

as if broken the day before, while on others lichens had either just become, or had long grown, attached. I so fully believed that this was owing to the frequent earthquakes, that I felt inclined to hurry from below each loose pile. As one might very easily be deceived in a fact of this kind, I doubted its accuracy, until ascending Mount Wellington, in Van Diemen's Land, where earthquakes do not occur, and there I saw the summit of the mountain similarly composed and similarly shattered, but all the blocks appeared as if they had been hurled into their present position thousands of years ago.

We spent the day on the summit, and I never enjoyed one more thoroughly. Chile, bounded by the Andes and the Pacific, was seen as in a map. The pleasure from the scenery, in itself beautiful, was heightened by the many reflections which arose from the mere view of the Campana range, with its lesser parallel ones, and of the broad valley of Quillota directly intersecting them. Who can avoid wondering at the force which has upheaved these mountains, and even more so at the countless ages which it must have required to have broken through, removed, and levelled whole masses of them? It is well in this case to call to mind the vast shingle and sedimentary beds of Patagonia, which, if heaped on the Cordillera, would increase its height by so many thousand feet. When in that country I wondered how any mountain-chain could supply such masses and not have been utterly obliterated. We must not now reverse the wonder, and doubt whether all-powerful time can grind down mountains — even the gigantic Cordillera—into gravel and mud.

The appearance of the Andes was different from that which I had expected. The lower line of the snow was of course horizontal, and to this line the even summits of the range seemed quite parallel. Only at long intervals a

group of points or a single cone showed where a volcano had existed, or does now exist. Hence the range resembled a great solid wall, surmounted here and there by a tower, and making a most perfect barrier to the country.

Almost every part of the hill had been drilled by attempts to open gold-mines; the rage for mining has left scarcely a spot in Chile unexamined. I spent the evening as before, talking round the fire with my two companions. The guasos of Chile, who correspond to the gauchos of the Pampas, are, however, a very different set of beings. Chile is the more civilized of the two countries, and the inhabitants, in consequence, have lost much individual character. Gradations in rank are much more strongly marked. The guaso does not by any means consider every man his equal, and I was quite surprised to find that my companions did not like to eat at the same time with myself.

This feeling of inequality is a necessary consequence of the existence of an aristocracy of wealth. It is said that some few of the greater land-owners possess from five to ten thousand pounds sterling per annum, an inequality of riches which I believe is not met with in any of the cattle-breeding countries eastward of the Andes. A traveller does not here meet that unbounded hospitality which refuses all payment, but yet is so kindly offered that no scruples can be raised in accepting it. Almost every house in Chile will receive you for the night, but a trifle is expected to be given in the morning; even a rich man will accept two or three shillings.

The gaucho, though he may be a cut-throat, is a gentleman; the guaso is in few respects better, but at the same time a vulgar, ordinary fellow. The two men, although employed much in the same manner, are different in their habits and attire, and the peculiarities of each are universal in their respective countries. The gaucho seems

part of his horse, and scorns to exert himself excepting when on its back; the guaso may be hired to work as a laborer in the fields. The former lives entirely on animal food, the latter almost wholly on vegetable. We do not here see the white boots, the broad drawers, and scarlet chilipa, the picturesque costume of the Pampas. Here common trousers are protected by black and green worsted leggings. The poncho, however, is common to both. The chief pride of the guaso lies in his spurs, which are absurdly large. I measured one which was six inches in the *diameter* of the rowel, and the rowel itself contained upward of thirty points. The stirrups are on the same scale, each consisting of a square carved block of wood, hollowed out, yet weighing three or four pounds. The guaso is perhaps more expert with the lazo than the gaucho, but, from the nature of the country, he does not know the use of the bolas.

AN ESCAPE FROM CAPTIVITY.

BENJAMIN F. BOURNE.

[Benjamin Franklin Bourne, mate of a vessel that sailed, *via* the Straits of Magellan, for California in 1849, during the intensity of the gold fever, was taken prisoner by the Patagonians, having landed to bring off some of the sailors. He remained in their hands for more than three months, and in his "The Captive in Patagonia" gives a detailed description of the character and customs of the natives of that country. We extract from his work a good brief description of the country and its people.]

PATAGONIA as it offered itself to my observation more than answered the descriptions of geographers,—bleak, barren, desolate, beyond description or conception,—only

to be appreciated by being seen. Viewed from the Straits of Magellan, it rises in gentle undulations or terraces. Far as the eye can reach, in a westerly direction, it assumes a more broken and hilly appearance, and long ranges of mountains extending from north to south divide the eastern from the western shore. The soil is of a light, sandy character, and bears nothing worthy the name of a tree. Low bushes, or underwood, are tolerably abundant, and in the valleys a coarse wiry grass grows luxuriantly. Streams of water are rare. The natives draw their supplies principally from springs or pools in the valleys, the water of which is generally brackish and disagreeable.

The variety of animal is nearly as limited as that of vegetable productions. The guanaco, a quadruped allied to the lama and with some resemblance to the camelopard, is found in considerable numbers. It is larger than the red deer, fleet on the foot, usually found in large herds, frequenting not only the plains, but found along the course of the Andes. Its flesh is a principal article of food; its skin is dried with the hair on, in such a manner that, when wet, it retains its pliability and softness. This process of preserving skins seems to be peculiar to the Indian tribes, and is not unlike that by which buffalo-robes, bear-skins, buckskins, and other articles of luxury, and even necessity, among us, are prepared by the North American Indians. Guanaco-skins are cut into pieces of all sizes, and sewed into a thousand fanciful patterns, every workman originating a style to suit himself. The hoofs are sometimes turned to account by the natives as soles for shoes, when they indulge in such a luxury, which is not often.

The enemy of the guanaco is the cougar, or "American lion," smaller than its African namesake, and more resembling the tiger in his character and habits, having a smooth, sleek coat, of a brownish-yellow color,—altogether a very

beautiful but ferocious creature. His chase is a favorite, though rare and dangerous, sport of the natives. Patagonia likewise boasts of the skunk, whose flesh is used for food. There are also foxes, and innumerable mice. Of birds, the only noticeable varieties are the condor, in the Andes, and the cassowary, a species of ostrich, smaller than that of Africa, on the plains; its plumage is not abundant, generally of a gray or dun color. Its flesh is tender and sweet, and with the fat much prized by the Indians. Like the African ostrich, it is exceedingly swift, only to be captured on horseback, and often fleet enough to outrun the fastest racer.

The climate is severe; the Rio Negro forms the northern boundary, and nearly the whole country is south of the parallel of 40° south latitude. At the time of my capture, which was in the month of May, the weather corresponded to that of November in the New England States. Its chilliness, however, was greatly increased by the bleak winds of that exposed locality. Along the Straits of Mágellan the weather is often exceedingly changeable. Sudden and severe squalls, often amounting almost to a hurricane, vex the navigation of the straits, and sweep over the coast with fearful fury.

The habits of the Patagonians, or at least of the tribe among whom I was cast, are migratory, wandering over the country in quest of game, or as their caprice may prompt them. They subsist altogether on the flesh of animals and birds. The guanaco furnishes most of their food, and all their clothing. A mantle of skins, sewed with the sinews of the ostrich, fitted closely about the neck and extending below the knee, is their only article of dress, except in the coldest weather, when a kind of shoe, made of the hind hoof and a portion of the skin above it, serves to protect their inferior extremities.

In person they are large; on first sight, they appear absolutely gigantic. They are taller than any other race I have seen, although it is impossible to give any accurate description. The only standard of measurement I had was my own height, which is about five feet ten inches. I could stand very easily under the arms of many of them, and all the men were at least a head taller than myself. Their average height, I should think, is nearly six and a half feet, and there were specimens that could have been little less than seven feet high. They have broad shoulders, full and well-developed chests, frames muscular and finely proportioned, the whole figure and air making an impression like that which the first view of the sons of Anak is recorded to have made on the children of Israel. They exhibit enormous strength, whenever they are sufficiently aroused to shake off their constitutional laziness and exert it.

They have large heads, high cheek-bones, like the North American Indians, whom they also resemble in their complexion, though it is a shade or two darker. Their foreheads are broad, but low, the hair covering them nearly to the eyes; eyes full, generally black, or of a dark brown, and brilliant, though expressive of but little intelligence. Thick, coarse, and stiff hair protects the head, its abundance making any artificial covering superfluous. It is worn long, generally divided at the neck, so as to hang in two folds over the shoulders and back, but is sometimes bound above the temples by a fillet, over which it flows in ample luxuriance. Like more civilized people, the Patagonians take great pride in the proper disposition and effective display of their hair. Their teeth are really beautiful, sound and white,—about the only enviable feature of their persons. Feet and hands are large, but not disproportionate to their total bulk. They have deep, heavy voices and

speak in guttural tones,—the worst guttural I ever heard, —with a muttering, indistinct articulation, much as if their mouths were filled with hot pudding.

Their countenances are generally stupid, but, on closer inspection, there is a gleam of low cunning that flashes through this dull mask, and is increasingly discernible on acquaintance with them; when excited, or engaged in any earnest business that calls their faculties into full exercise, their features light up with unexpected intelligence and animation. In fact, as one becomes familiar with them, he will not fail to detect an habitual expression of "secretiveness" and duplicity, which he will wonder he did not observe sooner. They are almost as imitative as monkeys, and are all great liars; falsehood is universal and inveterate with men, women, and children. The youngest seem to inherit the taint, and vie with the oldest in displaying it. The detection of a falsehood gives them no shame or uneasiness. To these traits should be added a thorough-paced treachery, and, what might seem rather inconsistent with their other qualities, a large share of vanity and an immoderate love of praise.

[The author has much more to say in this same vein, and gives a detailed and valuable account of their customs, which only his captivity could have enabled him to offer. His adventures were the reverse of pleasant, and he was fortunately successful in the end in inducing them to visit the coast near an island inhabited by whites. Here he made a bold stroke for freedom.]

Our horses' heads were now turned from the shore, and we rode back about an eighth of a mile to a large clump of bushes, unsaddled our beasts, and waited some time for the rest of our company, who had fallen in the rear. They came at last, our horses were turned adrift, fire was lighted, and, as the day was far spent, supper was in order. Then ensued a repetition—a final one, I trusted—of the grand

present to be levied on the Hollanders [as the natives called the white settlers], and of the speech which was to draw them out. The Indians arranged that I was to hoist the English flag,—the colors of the unfortunate brig "Avon," which they had brought along at my request,—and then to walk the shore to attract the attention of the islanders. On the approach of a boat, I was to be kept back from the beach to prevent escape; for I found that they were not, after all, as well assured of my good faith as might have been desirable. They thought, moreover, that when the white men saw a prisoner with them, they would come ashore to parley and offer presents to effect his release; in that case there might be a chance, if the negotiation proved unsatisfactory, to take bonds of fate in the form of another captive or two. So, at least, there was ground to suspect,—and some cause to fear that the rascals might prove too shrewd for all of us!

After talking till a late hour, the Indians threw themselves upon the ground, stuck their feet into the bushes and were soon fast asleep. I consulted the chief as to the propriety of modifying this arrangement by placing our heads, rather than our feet, under cover, since both could not be accommodated. He declined any innovations, and told me to go to sleep. I stretched myself on the ground, but as to sleep that was out of question. I lay all night thinking over every possible expedient for escape. We had no materials for a boat or raft of any description, and it was impossible to think of any plan that promised success; so that, after tossing in body and mind through the weary hours of night, I could only resolve to wait the course of events, and to take advantage of the first opportunity affording a reasonable hope of deliverance from this horrid captivity. Snow, sleet, and rain fell during the night; and I rose early, thoroughly chilled, every tooth

chattering. A fire was kindled and the last morsel of meat that remained to us was cooked and eaten. The weather continued squally till the middle of the afternoon.

After breakfast the chief went with me to the shore, bearing the flag. On the beach I found a strip of thick board, to which I fastened the colors, and then planted it in the sand. The bushes around, which have a kind of oily leaf, and readily ignite, were set on fire. I then walked to the beach,—but no boat came. When it cleared up sufficiently to see, I observed little objects moving about on the island. The day wore away with fruitless attempts to attract their attention. With an aching heart I returned, at dark, to the camping-ground. On this island my hopes had so long centred,—if they were now to be disappointed, how could I endure it? The Indians began to talk of rejoining the tribe the following day; I opposed the motion with all the dissuasives at command, assuring them that at sight of our flag the islanders would surely come over in a boat, and that, if they would only wait a little, they could go over to the island and enjoy themselves to their hearts' content; representing the absolute necessity that I should procure the rum, etc., we had talked of, and how embarrassing it would be to go back to the tribe empty-handed, after all that had been said, to be ridiculed and reproached. It would never do.

Our conversation was continued till quite late, when we ranged ourselves, hungry and weary, for another night. For hours I was unable to sleep. The uncertainties of my situation oppressed me, and I lay restless, with anxiety inexpressible, inconceivable by those whom Providence has preserved from similar straits. It was a season of deep, suppressed, silent misery, in which the heart found no relief but in the mute supplication to Him who was alone able to deliver. Towards morning, exhausted with the in-

tensity of emotion acting on an enfeebled body, I slept a little, and woke at early dawn, to a fresh consciousness of my critical position.

The weather had been fair during the night, but there were now indications of another snow-storm. I waited long and impatiently for my companions to awake, and at last started off in quest of fuel, on returning with which they bestirred themselves and started a fire, which warmed our half-benumbed limbs. There lay the little island, beautiful to eyes that longed, like mine, for a habitation of sympathizing men, about a mile and a half distant. It almost seemed to recede while I gazed, so low had my hopes sunken under the pressure of disappointment and bitter uncertainty. A violent snow-storm soon setting in, it was hidden from view; everything seemed to be against me. It slackened and partially cleared up; then came another gust, filling the air and shutting out the prospect.

In this way it continued till past noon; at intervals, as the sky lighted up, I took a firebrand and set fire to the bushes on the beach, and then hoisted the flag again, walking wearily to and fro till the storm ceased and the sky became clear. The chief concealed himself in a clump of bushes, and sat watching with cat-like vigilance the movements of the islanders. After some time he said a boat was coming; I scarcely durst look in the direction indicated, lest I should experience a fresh disappointment; but I did look, and saw, to my great joy, a boat launched, with four or five men on board, and pushing off the shore. On they came; the chief reported his discovery, and the rest of the Indians came to the beach, where I was still walking backward and forward. The boat approached, not directly off where I was, but an eighth of a mile, perhaps, to the windward, and there lay on her oars.

The Indians hereupon ordered me to return to the

camping-ground, but, without heeding them, I set off at a full run towards the boat. They hotly pursued, I occasionally turning and telling them to come on, that I only wanted to see the boat. "Stop! stop!" they bawled. "Now, my legs," said I, "if ever you want to serve me, this is the time." I had one advantage over my pursuers: my shoes, though much the worse for wear, protected my feet from the sharp stones, which cut theirs at every step; but, under all disadvantages, I found they made about equal speed with myself. As I gained a point opposite the boat, the Indians slackened their speed and looked uneasily at me; the man in the stern of the boat hailed me, inquiring what Indians these were, what number of them, and how I came among them. I replied in as few words as possible, and told him we wished to cross to the island. He shook his head; they were bad fellows, he said; he could not take me with the Indians. They began to pull away. I made signs of distress and waved them to return, shouting to them through my hands. The boat was again backed within hailing distance. "Will you look out for me if I come by myself?" "Yes," was the prompt reply.

The Indians all this time had kept within ten or fifteen feet of me, with their hands on their knives, and reiterating their commands to come back, at the same time edging towards me in a threatening manner. "Yes, yes," I told them, "in a moment; but I want to look at the boat,"—taking care, however, to make good my distance from them.

At the instant of hearing the welcome assurance that I should be cared for, I drew out the watch (which I had brought, according to promise, to have a new crystal inserted at Holland), and threw it into the bushes; the salt water would spoil it, and, if I *should* be retaken, the spoiling of that would be an aggravation which might prove

fatal. At the same moment I gave a plunge headlong into the river; my clothes and shoes encumbered me, and the surf, agitated by a high wind, rolled in heavy seas upon the shore. The boat was forty or fifty yards off, and, as the wind did not blow square in shore, drifted, so as to increase the original distance, unless counteracted by the crew. Whether the boat was backed up towards me I could not determine; my head was a great part of the time under water, my eyes blinded with the surf, and most strenuous exertion was necessary to live in such a sea.

As I approached the boat I could see several guns, pointed, apparently, at me. Perhaps we had misunderstood each other; perhaps they viewed me as an enemy. In fact, they were aimed to keep the Indians from following me into the water, which they did not attempt. My strength was fast failing me; the man at the helm, perceiving it, stretched out a rifle at arm's length. The muzzle dropped into the water and arrested my feeble vision. Summoning all my remaining energy, I grasped it, and was drawn towards the boat; a sense of relief shot through and revived me, but revived, also, such a dread lest the Indians should give chase, that I begged them to pull away, I could hold on. The man reached down and seized me by the collar, and ordered his men to ply their oars. They had made but a few strokes when a simultaneous cry broke from their lips, "Pull the dear man in! Pull the dear man in!" They let fall their oars, laid hold of me, and, in their effort to drag me over the side of their whale-boat, I received some injury. I requested that they would let me help myself, and, working my body up sufficiently to get one knee over the gunwale, I gave a spring with what strength was left me, and fell into the bottom of the boat.

They kindly offered to strip me and put on dry clothing;

but I told them, if they would only work the boat farther from the shore, I would take care of myself. They pulled away, while I crawled forward, divested myself of my coat, and put on one belonging to one of the crew. Conversation, which was attempted, was impossible. It was one of the coldest days in a Patagonian winter. I was chilled through, and could only articulate, "I ca-n't ta-lk now; I'll ta-lk by a-nd by." Some liquor, bread, and tobacco, which had been put on board for my ransom, on supposition that this was what the signal meant, was produced for my refreshment. The sea was heavy, with a strong head-wind, so that, though the men toiled vigorously, our progress was slow. I was soon comfortably warmed by the stimulants provided, and offered to lend a hand at the oar, but the offer was declined. The shouts and screams of the Indians, which had followed me into the water, and rung hideously in my ears while struggling for life in the surf, were kept up till distance made them inaudible. Whether they found the watch, whose mysterious tick at once awed and delighted them, and restored it to its place of state in the chief's lodge, or whether it still lies rusting in the sands by the sea-shore, is a problem unsolved.

The boat at last grounded on the northern shore of the island. Mr. Hall, the gentleman who commanded the party, supported my tottering frame in landing, and, as we stepped upon the shore, welcomed me to their island. I grasped his hand and stammered my thanks for this deliverance, and lifted a tearful eye to heaven in silent gratitude to God. I was then pointed to a cabin near by, where a comfortable fire was ready for me. "Now," I heard Mr. Hall say, "let us fire a salute of welcome to the stranger. Make ready! Present! Fire!" Off went all their muskets, and a very cordial salute it appeared to be.

INDEX.

		PAGE
A Hunter's Christmas Dinner	J. S. CAMPION	124
Alaska, A Summer Trip to	JAMES A. HARRISON	239
Alligators, Among Florida	S. C. CLARKE	74
Arctic Seas, Fugitives from the	ELISHE KENT KANE	210
BACON, ALFRED TERRY	A Colorado "Round-Up"	133
BOURNE, BENJAMIN F	An Escape from Captivity	274
BRADFORD, LOUIS C	Among the Cowboys	141
BRYANT, HENRY G	The Grand Falls of Labrador	189
Buffalo, Hunting the	WASHINGTON IRVING	147
CAMPION, J. S	A Hunter's Christmas Dinner	114
Canadian Woods, Hunting Scenes in the	B. A. WATSON	178
Captivity, An Escape from	BENJAMIN F. BOURNE	274
CARVER, JONATHAN	The Fort William Henry Massacre	249
CLARKE, S. C	Among Florida Alligators	74
CLARKE, WILLIAM	The Great Falls of the Missouri	168
COLLIS, SEPTIMA M	The Muir Glacier	230
Colorado Round-Up, A	ALFRED TERRY BACON	133
Country of the Sioux	MERIWETHER LEWIS	157
Cowboys, Among the	LOUIS C. BRADFORD	141
DARWIN, CHARLES	Valparaiso and Its Vicinity	265
Death, Rescued from	W. S. SCHLEY	220
Down the Ohio and Mississippi	THOMAS L. NICHOLS	94
Escape, An, from Captivity	BENJAMIN F. BOURNE	274
Esquimaux, Life Among the	WILLIAM EDWARD PARRY	200
FEATHERSTONHAUGH, G. W.	Winter on the Prairies	114
Florida Alligators, Among	S. C. CLARKE	74
Fort William Henry Massacre, The	JONATHAN CARVER	249
Fugitives from the Arctic Seas	ELISHA KENT KANE	210
Gaucho, The and His Horse	THOMAS J. HUTCHINSON	257
Glacier, The Muir	SEPTIMA M. COLLIS	230
Grand Falls of Labrador, The	HENRY G. BRYANT	189
Great Falls of the Missouri	WILLIAM CLARKE	168
HARRISON, JAMES A	A Summer Trip to Alaska	239
Horse, The Gaucho and His	THOMAS J. HUTCHINSON	257
Hunter's Christmas Dinner, A	J. S. CAMPION	124
Hunting Scenes in the Canadian Woods	B. A. WATSON	178
Hunting the Buffalo	WASHINGTON IRVING	147
HUTCHINSON, THOMAS J	The Gaucho and His Horse	257
In the Mammoth Cave	THERESE YELVERTON	83
IRVING, WASHINGTON	Hunting the Buffalo	147
KANE, ELISHA KENT	Fugitives from the Arctic Seas	210

		PAGE
Labrador, the Grand Falls of	HENRY C. BRYANT	189
LATHAM, HENRY	From New York to Washington in 1866	39
LEIGH, OLIVER H. G.	New Dependencies of the United States	9
LEWIS, MERIWETHER	In the Country of the Sioux	157
Life Among the Esquimaux	WILLIAM EDWARD PARRY	200
Mammoth Cave, In the	THERESE YELVERTON	83
Massacre, The Fort William Henry	JONATHAN CARVER	249
Mississippi, Down the Ohio and	THOMAS L. NICHOLS	94
Missouri, The Great Falls of the	WILLIAM CLARKE	168
Muir Glacier, The	SEPTIMA M. COLLIS	230
Natural Bridge and Tunnel of Virginia	EDWARD A. POLLARD	49
New Dependencies of the United States	OLIVER H. G. LEIGH	9
New England, Winter and Summer in	HARRIET MARTINEAU	22
New Orleans to Red River, From	FREDERICK LAW OLMSTED	104
New York to Washington in 1866	HENRY LATHAM	39
Niagara Falls and the Thousand Islands	CHARLES MORRIS	31
NICHOLS, THOMAS L.	Down the Ohio and Mississippi	94
Ohio and Mississippi, Down the	THOMAS L. NICHOLS	94
OLMSTED, FREDERICK LAW	From New Orleans to Red River	104
PARRY, WILLIAM EDWARD	Life Among the Esquimaux	200
Plantation Life in War Times	WILLIAM HOWARD RUSSELL	62
POLLARD, EDWARD A.	Natural Bridge and Tunnel of Virginia	49
Prairies, Winter on the	G. W. FEATHERSTONHAUGH	114
Red River, From New Orleans to	FREDERICK LAW OLMSTED	104
Rescued from Death	W. S. SCHLEY	220
Round-Up, A Colorado	ALFRED TERRY BACON	133
RUSSELL, WILLIAM HOWARD	Plantation Life in War Times	62
SCHLEY, W. S.	Rescued from Death	220
Sioux, In the Country of the	MERIWETHER LEWIS	157
Summer Trip to Alaska, A	JAMES A. HARRISON	239
Thousand Islands, The, and Niagara Falls	CHARLES MORRIS	31
United States, New Dependencies of the	OLIVER H. G. LEIGH	9
Valparaiso and Its Vicinity	CHARLES DARWIN	265
Virginia, Natural Bridge and Tunnel of	EDWARD A. POLLARD	49
War Times, Plantation Life in	WILLIAM HOWARD RUSSELL	62
Washington in 1866, From New York to	HENRY LATHAM	39
WATSON, B. A.	Hunting Scenes in the Canadian Woods	178
Winter and Summer in New England	HARRIET MARTINEAU	22
Winter on the Prairies	G. W. FEATHERSTONHAUGH	114
YELVERTON, THERESE	In the Mammoth Cave	83

COLUMBIA UNIVERSITY LIBRARIES

This book is due on the date indicated below, or at the expiration of a definite period after the date of borrowing, as provided by the rules of the Library or by special arrangement with the Librarian in charge.

DATE BORROWED	DATE DUE	DATE BORROWED	DATE DUE
C28(1141)M100			

910.4 M834 1
Morris
With the world's great travellers

910.4 M834 1